



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

July 11, 2003

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

RE: Lehigh Cement #093-16851-00002

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

FNTVPMOD.wpd 8/21/02

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
Administrator, Christine Todd Whitman
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNTVPMOD..wpd 8/21/02

Debbie L. Tolliver
Lehigh Cement Company
P. O. Box 97
Mitchell, Indiana 47446

Re: 093-16851-00002
First Significant Permit Modification to
Part 70 permit No.: T 093-5990-00002

Dear Ms. Tolliver:

Lehigh Cement Company was issued Part 70 operating permit T 093-5990-00002 on December 30, 2003 for the operation of a Portland cement manufacturing operation. An application requesting changes to this permit was received on June 28, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The permit modification consists of changes documented in the Technical Support Document (TSD) and the addendum to the Technical Support Document (TSD).

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Ghassan Shalabi, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Ghassan Shalabi or extension (3-0431), or dial (317) 233-0431.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

GAS

cc: File - Lawrence County
U.S. EPA, Region V
Lawrence County Health Department
Air Compliance Section Inspector - Ray Schick
Compliance Data Section - Karen Nowak
Administrative and Development - Delisa Lee
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Lehigh Cement Company
121 North First Street
Mitchell, Indiana 47446**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T093-5990-00002	
Original issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 30, 2002 Expiration Date: December 30, 2007
First Significant Permit Modification No.: 093-16851-00002	Conditions Affected: Table of contents, A.2, B.7, B.11, B.12, B.18, B.22, C.1, C.8, C.11, C.12, C.16, C.17, C.18, C.19, C.20, D.1.2, D.1.3, D.1.6, D.1.9, D.1.11, D.1.12, Unit description in D.2, D.2.1, D.2.2, D.2.3, D.2.4, D.2.5, D.2.6, D.2.7, D.2.9, D.2.10, D.2.11, D.2.12, D.2.13, D.2.14, D.2.16, D.2.17, D.3.1, D.3.5, D.3.6, D.3.8, D.3.10, D.3.11, D.3.12, D.3.13, D.3.15, D.3.16, Unit description in D.4, D.4.1, D.4.4, D.4.5, D.4.6, D.4.7, D.4.8, D.4.10, D.4.12, D.4.13, D.4.14, D.4.16, D.4.17, D.5.1, D.5.6, D.5.7, D.5.9, D.5.10, D.5.11, D.5.12, D.5.15, D.5.16, Quarterly Report for Use When Combusting Coal Form
Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 11, 2003

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Certification
Emergency Occurrence Report
Quarterly Reports
Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 and the facility/emissions unit description boxes in Sections D of the permit, is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	121 North First Street, Mitchell, Indiana 47446
Mailing Address:	121 North First Street, P.O. Box 97, Mitchell, Indiana 47446
Phone Number:	(812) 849-2191
SIC Code:	3241
County Location:	Lawrence
Source Location Status:	Attainment or unclassified for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules Major Source, Section 112 of the Clean Air Act One of the 28 listed source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

The quarry activities, as follows:

- (a) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

The quarry material sizing facilities/emissions units, as follows:

- (b) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
- (c) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
- (d) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (e) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (f) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as

QDC5, and exhausting to one (1) stack, identified as S-QDC5.

- (g) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
- (h) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
- (i) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
- (j) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control PM emissions, and exhausting directly to the atmosphere.

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

- (k) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
- (l) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
- (m) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
- (n) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.
- (o) CKD disposal and mining facilities, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw material handling and storage facilities/emissions units, as follows:

- (p) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC1, and exhausting to one (1) stack, identified as S-RMDC1.
- (q) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
- (r) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.
- (s) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the

atmosphere.

- (t) One (1) coal pile, identified as F04, storage commencing prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (u) Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.

The raw mill facilities/emissions units, as follows:

- (v) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU11A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
- (w) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU12A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

The raw mill storage facilities/emissions units, as follows:

- (x) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
- (y) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (z) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (aa) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (bb) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

- (cc) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
- (dd) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as

FDC2, and exhausting to one (1) stack, identified as S-FDC2.

- (ee) One (1) North storage drag, identified as EU26b, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (ff) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (gg) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.
- (hh) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (ii) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.
- (jj) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (kk) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the north clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

The finish mill facilities/emissions units, as follows:

- (ll) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (mm) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (nn) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
- (oo) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (pp) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.

- (qq) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

The finish material storage facilities/emissions units, as follows:

- (rr) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (ss) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.
- (tt) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively.

The bulk loading and packaging facilities/emissions units, as follows:

- (uu) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (vv) One (1) east truck vacuolader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (ww) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (xx) One (1) west truck vacuolader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (yy) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (zz) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.
- (aaa) One (1) articulolader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (bbb) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

The kiln facilities/emissions units, as follows:

- (ccc) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (ddd) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (eee) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

The clinker cooler facilities/emissions units, as follows:

- (fff) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (ggg) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (hhh) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

- (1) This stationary source includes the following specifically regulated insignificant activities:
- Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (2) This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):
- (a) Space heaters, process heaters, or boilers using the following fuels:
- (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (2) Fuel oil-fired combustion sources with heat input equal to or less than

two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.

- (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (c) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (d) Refractory storage not requiring air pollution control equipment.
- (e) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (g) Heat exchanger cleaning and repair.
- (h) Paved and unpaved roads and parking lots with public access.
- (i) Underground conveyors with PM controlled by total enclosure.
- (j) On-site fire and emergency response training approved by the department.
- (k) Emergency generators as follows:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
- (l) Stationary fire pumps.
- (m) A laboratory as defined in 326 IAC 2-7-1 (21)(D).
- (n) Other categories with emissions below insignificant thresholds as follows:
 - (1) Two (2) grinding aid storage tanks.
 - (2) Three (3) Airalon/Airplas storage tanks.
 - (3) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter controlled by total enclosure.
 - (4) One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments to this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit except the facility/emissions unit descriptions contained in Sections A.1 through A.3 and Sections D, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (b) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.

- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B - Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application forms, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the applicable terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year and shall be submitted in letter form no later than July 1 of the following year to the addresses listed below. Subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the

basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
- (5) Such other facts, as specified in Section D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1), (3) and (13)] [326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility/emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation,

Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility/emissions unit was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes the malfunction rule, 326 IAC 1-6 (except the requirement for a PMP in 326 IAC 1-6-3), for sources subject to 326 IAC 2-7 after the effective date of 326 IAC 2-7. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone, facsimile, or other agreed upon method, of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities/emissions units during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) From the effective date of this permit, the Permittee's right to operate this source is pursuant to this Title V permit. All previously issued operating permits, including those listed below, are superseded by this permit. All operating permits that are currently in effect are hereby revoked by the issuance of this Title V Permit and are no longer in effect.
 - (1) OP 47-01-88-0072, issued on May 30, 1984;
 - (2) OP 47-01-88-0073, issued on May 30, 1984;
 - (3) OP 47-01-88-0074, issued on May 30, 1984;
 - (4) OP 47-01-88-0075, issued on May 30, 1984;
 - (5) OP 47-01-88-0076, issued on May 30, 1984;
 - (6) OP 47-01-88-0077, issued on May 30, 1984;
 - (7) OP 47-01-88-0078, issued on May 30, 1984;
 - (8) OP 47-01-88-0079, issued on May 30, 1984;
 - (9) OP 47-01-88-0080, issued on May 30, 1984;
 - (10) OP 47-01-92-0097, issued on July 22, 1987; and

- (11) OP 47-04-92-0099, issued on March 30, 1988.
- (c) Construction Permit CP093-4598-00002, issued on February 27, 1998, which allowed the source to burn waste tires as a fuel in their kilns, has been revoked. Subsequent amendments and modifications to that permit including A093-9623 issued April 29, 1998, 093-11248 issued September 9, 1999, and 093-11552 issued October 23, 2000 have also been revoked. The source is no longer permitted to burn waste tires.
- (d) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following nonapplicability determinations regarding this source:
- (1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 326 IAC 12 and 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.
 - (2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as volatile organic liquid (VOL).
 - (3) The quarry activities, the quarry material sizing facilities/emission units, and the raw material handling and storage facilities/emission units listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior to the applicability date of August 31, 1983.
 - (4) None of the other facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they are not affected facilities and/or this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).
 - (5) None of the facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.
 - (6) Paragraphs #2 through #7 of exemption CP 093-9431-00002, issued August 19, 1999, list requirements pursuant to Indiana Solid Waste Regulations, 326 IAC 10 and 326 IAC 11. IDEM has not included these requirements in the Part 70 permit because IDEM, OAQ has determined that these conditions are not applicable requirements as defined by 326 IAC 2-7-1(6).
- (e) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (f) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to

be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (g) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (h) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (i) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (j) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted
- by this permit.

- (b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) Deviations from any permit requirements, the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent.

- (c) A deviation caused by an emergency shall be included in the Quarterly Deviation and Compliance Monitoring Report. (Additional requirements for emergencies are in Section B - Emergency Provisions.)
- (d) A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4] [326 IAC 2-7-3]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

- (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action denying the renewal application and all appeals of such denial have been exhausted, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-

7-12(b)(2)]

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:
- Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- and
- United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
- by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.
- Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the

required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report, or compliance certification. Therefore, the notifications required by subsections (a) and (b), which shall be submitted by the Permittee, do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities/emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilizes any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting an administrative amendment to reflect a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, particulate emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule or this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(a)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. The reports submitted by the Permittee do require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring requirements not already legally required shall be implemented within ninety (90) days of the original Part 70 permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new or modified facilities/emission units, compliance monitoring for new or modified facilities/emission units or facilities/emission units added or modified through a source modification shall be implemented when operation begins.

C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitors (COMS) and related equipment.
- (b) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous opacity monitor (COM) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of one (1) hour or more, timely compliance with the applicable opacity limits shall be demonstrated by the following:
 - (1) Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the COM. A trained employee shall record whether emissions are normal or abnormal at the time of the reading.
 - (A) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. Permittee may also use an independent contractor who has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (B) If abnormal emissions are noted during two (2) consecutive VE notations, the Permittee shall begin opacity observations in accordance with 40 CFR Part 60, Appendix A, Method 9, within four (4) hours of the second abnormal VE notation.

- (C) VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.
- (2) If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor opacity from the stack.
 - (A) Visible Emission readings shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.
 - (B) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.
 - (C) Method 9 opacity readings may be discontinued once COM is online.
- (3) All of the Method 9 opacity readings taken during this period shall be reported in the Quarterly Reports Summary of Opacity Emissions.
- (d) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop, voltage, current, or temperature across any part of the unit or its control device, the gauge or instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 14, 2000.

- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68 Subpart G]

If a regulated substance as defined in 40 CFR 68 is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5][326 IAC 2-7-6]

-
- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the

applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

- (4) Failure to take reasonable response steps shall be considered deviation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. Upon request, the Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility/emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification

by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (Regulated pollutant which is used only for purposes of Section 19 of this rule) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data, reports, and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

C.22 NESHAP Notification and Reporting Requirements [40 CFR Part 63, Subparts A and LLL]

The Permittee shall comply with all reporting provisions specified in 40 CFR Part 63, Subpart LLL, and in particular:

- (a) The Permittee has submitted an initial notification in accordance with 40 CFR 63.9(b) (Subpart A, General Provisions) on October 11, 1999 to U.S. EPA and IDEM. The Permittee provided the following information:
- (1) The name and address of the Permittee;
 - (2) The address (i.e., physical location) of the affected source;
 - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - (4) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
 - (5) A statement of whether the affected source is a major source or an area source.
- (b) The Permittee shall submit a notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e).
- (c) The Permittee shall submit a notification of opacity and visible emission observations as required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).
- (d) The Permittee shall submit notification, as required by 40 CFR 63.9(g), of the date that continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.

(e) The Permittee shall submit notification of compliance status, as required by 40 CFR 63.9(h).

(f) The notification(s) as required in this section shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The quarry activities, as follows:

- (1) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

The quarry material sizing facilities/emissions units, as follows:

- (1) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
- (2) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
- (3) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (4) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (5) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.
- (6) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
- (7) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
- (8) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
- (9) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control PM emissions, and exhausting directly to the atmosphere.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

- (1) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
- (2) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
- (3) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
- (4) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.
- (5) CKD disposal, and mining facilities/emission units, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the quarry material sizing facilities/emissions units (EU01 through EU08 and F02) shall not exceed 77.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 975 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pounds per hour limitation calculated using the above referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

- (b) Pursuant to minor source modification 093-11313 issued November 9, 1999 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from the cement kiln dust (CKD) storage, disposal, mining, and handling facilities/emissions units (EU24, EU24A, and EU24B) shall not exceed 51.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall

be accomplished by use of the equation:

$$E = 4.1 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the facilities/emission units listed in this section are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities that were constructed or modified after the applicability date of August 17, 1971.
- (b) None of the quarry facilities/emission units or quarry material sizing facilities/emission units, or the cement kiln dust storage, disposal, mining, and handling facilities/emission units listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not affected facilities under this rule.

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply upon startup of the preheater Kilns #1 and #2:
 - (1) The combined PM emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 5.68 pounds per hour.
 - (2) The combined PM10 emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 3.40 pounds per hour.
- (b) Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:
 - (1) The Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) shall each be limited to 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
 - (2) PM and PM10 emissions from baghouse QDC2 controlling the Primary Crusher (EU01) and from baghouse QDC3 controlling the Surge Bin and Transfer System (EU02) shall each not exceed 0.90 pounds per hour.
 - (3) PM and PM10 emissions from baghouse QDC7 controlling Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08) shall each not exceed 0.44 pounds per hour.
 - (4) PM and PM10 emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) and from baghouse QDC6 controlling the South Screen House (EU06) shall each not exceed 1.44 pounds per hour.

- (5) PM and PM10 emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.
- (6) PM and PM10 emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.
- (7) PM and PM10 emissions from baghouse KDC7A controlling the CKD Truck Unloading System (EU24A) shall each not exceed 0.36 pounds per hour.
- (8) PM and PM10 emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section.

Compliance Determination Requirements

D.1.5 Particulate Control

Pursuant to minor source modification 093-11313 issued November 9, 1999, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to comply with Conditions D.1.1 and D.1.3.

D.1.6 Testing requirement [326 IAC 2-1.1-11]

To verify compliance with condition D.1.3(b), the permittee shall, within 60 days after achieving the maximum capacity but no later than 180 days after startup of preheater Kiln #1 (EU15) and Kiln #2 (EU16), perform PM and PM10 testing on the Secondary Crusher (EU03), the Tertiary Crusher (EU04), and the North Screen House (EU05) utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit. PM10 includes filterable and condensible PM10.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visible Emissions Notations

Visible emission notations of all the baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (d) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed or when visible emissions are observed crossing the property line. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse listed in this section, at least once per shift when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the processes listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3(b)(1), the Permittee shall maintain records of the Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) operating hours.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the differential static pressure of each baghouse once per shift.
- (d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3(b)(1) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The raw material handling and storage facilities/emissions units, as follows:

- (1) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC1 and exhausting to one (1) stack, identified as S-RMDC1.
- (2) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
- (3) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.
- (4) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.
- (5) One (1) coal pile, identified as F04, constructed prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (6) Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.

The raw mill facilities/emissions units, as follows:

- (1) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU11A, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
- (2) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU12A, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

Insignificant Activities, as follows:

- (1) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter emissions controlled by total enclosure, and exhausting to the kilns.
- (2) One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw material conveying system (EU09) shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the shale crusher (EU10) shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #1 (EU11 and EU11A) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #2 (EU12 and EU12A) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the material storage building (F03), and the raw mills (EU11, EU11A, EU12 and EU12A) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) shall each not exceed ten percent (10%) opacity. On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.2.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply to the natural gas-fired burners (EU11A and EU12A).

D.2.5 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the natural gas-fired burners (EU11A and EU12A) were not to operate at the same time as the then existing 37 million

Btu per hour coal-fired stoker. Therefore, the addition of the natural gas-fired burners did not result in an emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subparts A and F, will not apply to the raw mills (EU11 and EU12) or the natural gas-fired burners (EU11A and EU12A) as a result of this modification.

D.2.6 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL] [40 CFR 60, Subpart Y]

- (a) The raw material handling and storage facilities/emission units (EU09, EU10, F03, F04, F08, and F09) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they were constructed prior to the applicability date of August 17, 1971 and have not been modified since the applicability date, or they are not considered affected facilities under the rule.
- (b) The conveying system (EU09), the shale crusher (EU10), the coal pile (F04), the coal unloading building (F08), the raw material stockpiles (F09), and the insignificant coal mills are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because these facilities/emission units are not affected facilities under the regulation.
- (c) The coal mills and the coal conveyors are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are completely enclosed and there is no discharge to the atmosphere from the coal mills.
- (d) The coal pile (F04) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because it is not considered an affected facility under the regulation. Additionally, facilities/emission units EU09, EU10, F03, F08, F09, EU11A, EU12A, EU11, EU12, the three insignificant coal mills, the coal feeder conveyor and the coal unloading conveyor are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are not affected facilities under the rule or they were not constructed or modified after October 24, 1974.

D.2.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

- (a) The Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) shall each be limited to 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
- (b) PM and PM10 emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.
- (c) PM and PM10 emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.
- (d) PM and PM10 emissions from baghouse RMDC3 and baghouse RMDC4 controlling Raw Mill #1 (EU11) and Raw Mill #2 (EU12) respectively shall each not exceed 4.51 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

D.2.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.2.12 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition D.2.3 by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Within 60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2, in order to demonstrate compliance with Condition D.2.1 and D.2.7, the Permittee shall perform PM and PM10 testing on the Raw Mills (EU11, EU11A, EU12 and EU12A) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit. PM10 includes filterable and condensable PM10.

D.2.10 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to comply with Conditions D.2.1, D.2.3 and D.2.7.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.2.3; and
 - (2) Procedures to be used to periodically monitor the material storage building (F03), which is subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.

- (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

- (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

D.2.12 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts controlling the raw mills (EU11, EU11A, EU12 and EU12A), shall be performed once per day during normal daylight operations. Visible emission notations of all other baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions from the

stacks are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) On days that the NESHAP monitoring required in Condition D.2.11 is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse controlling the raw mills (EU11, EU11A, EU12 and EU12A) at least once per day when the associated facility/emissions unit is in operation. The Permittee shall record the total static pressure drop across all other baghouses listed in this section, at least once per shift when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.14 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the processes listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.2.15 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the

determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.16 Record Keeping Requirements

- (a) To document compliance with Condition D.2.12, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts controlling the raw mills (EU11, EU11A, EU12 and EU12A) once per day and all other baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.2.13, the Permittee shall maintain records of the differential static pressure of each baghouse controlling the raw mills (EU11, EU11A, EU12 and EU12A) once per day and all other baghouses once per shift.
- (c) To document compliance with Condition D.2.14, the Permittee shall maintain records of the results of the inspections required under Condition D.2.14.
- (d) On and after the NESHAP 40 CFR 63, Subpart LLL compliance date, to document compliance with the NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (e) To document compliance with Condition D.2.7(a), the Permittee shall maintain records of the Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) operating hours.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.17 Reporting Requirements

- (a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
- (1) The plan required by Condition D.2.11 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:
- United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
- Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) A quarterly summary of the information to document compliance with Condition D.2.7(a)

shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The raw mill storage facilities/emissions units, as follows:

- (1) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
- (2) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (3) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (4) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (5) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

- (1) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
- (2) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (3) One (1) North storage drag, identified as EU26b, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, constructed in 1959, and exhausting to one (1) stack, identified as S-FDC2.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

- (4) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (5) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.
- (6) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (7) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.
- (8) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (9) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the North clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

The finish mill facilities/emissions units, as follows:

- (1) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (2) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (3) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
- (4) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (5) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.
- (6) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The finish material storage facilities/emissions units, as follows:

- (1) One (1) surge bin, identified as EU37, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (2) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.
- (3) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively

The bulk loading and packaging facilities/emissions units, as follows:

- (1) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (2) One (1) east truck vacuolader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (3) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (4) One (1) west truck vacuolader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (5) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (6) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.
- (7) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (8) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from raw mill blending and kiln supply storage facilities/emissions units (EU13 and EU14) shall not exceed 61.0 pounds per hour (total for both EU13 and EU14)

when operating at a process weight rate of 250 tons per hour.

- (b) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #1 (EU18) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons per hour.
- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #2 (EU20) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #3 (EU22) shall not exceed 48.2 pounds per hour when operating at a process weight rate of 73 tons per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the south storage drag (EU25) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the north clinker tower (EU26a) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.
- (g) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the north storage drag (EU26b) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.
- (h) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the south clinker tower (EU27) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.
- (i) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the pan clinker conveyor (EU29) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.
- (j) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the roll crusher (EU31) shall not exceed 60.5 pounds per hour when operating at a process weight rate of 240 tons per hour.
- (k) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #1 and associated feed bin (EU32) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- (l) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #2 and associated feed bin (EU33) shall not exceed 42 pounds

per hour when operating at a process weight rate of 37 tons per hour.

- (m) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #3 and associated feed bin (EU34) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- (n) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #4, associated feed bin and separator (EU35 and EU36) shall not exceed 45 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 50 tons per hour.
- (o) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the lime bin (EU38) shall not exceed 13.6 pounds per hour when operating at a process weight rate of 6 tons per hour.
- (p) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the surge bin (EU37) shall not exceed 41.3 pounds per hour when operating at a process weight rate of 35 tons per hour.
- (q) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the north silo operation (EU39A) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.
- (r) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the south silo operation (EU39B) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.
- (s) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the silo transfer system (EU40A) shall not exceed 63 pounds per hour when operating at a process weight rate of 300 tons per hour.
- (t) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the silo transfer system (EU40B) shall not exceed 63 pounds per hour when operating at a process weight rate of 300 tons per hour.
- (u) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the east truck loadout bin and vaculoader (EU41 and EU42) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 450 tons per hour.
- (v) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the west truck loadout bin and vaculoader (EU43 and EU44) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 450 tons per hour.

- (w) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the railroad loadout bin and articuloader (EU45 and EU46) shall not exceed 60.5 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 240 tons per hour.
- (x) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the packing machine (EU47) shall not exceed 43 pounds per hour when operating at a process weight rate of 40 tons per hour.

The pounds per hour limitation for the lime bin (EU38) was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The pounds per hour limitations for all the other processes were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pound per hour limit calculated using the above-referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.3.2 Supersession of a Condition in a Previously Issued Construction Permit [326 IAC 12] [40 CFR 60, Subpart F]

CP 093-2770-00002, issued March 3, 1993 stated that pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.60 through 60.66) Subpart F, (Standards of Performance for Portland Cement Plants), visible emissions from the hydrated lime feed system (EU38) and the clinker ladders (EU26c, EU28, and EU30) shall not exceed 10% opacity (40 CFR 60.62(c)). However, upon further review, it has been determined that the three clinker ladders (EU28, EU30, and EU26c) which were permitted in CP 093-2770-00002, were updates to existing drop points, which reduced emissions. Therefore, they were not "modifications" as defined in 40 CFR 60.14. Consequently, 40 CFR 60, Subpart F does not apply to the clinker ladders (EU28, EU30, and EU26c).

D.3.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.3.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36, and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) shall not exceed ten percent (10%) opacity. On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.3.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) The raw mill storage facilities/emissions units (EU13, EU14, EU18, and EU20), the finish mill facilities/emission units (EU32, EU33, and EU34), the clinker handling facilities (EU25, EU26a, EU26b, EU26c, EU28, EU29, and EU30), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39A, EU39B, EU40A, EU40B, EU41 through EU46 and F06) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities under the rule or they were not constructed or modified after the applicability date of August 17, 1971.
- (b) The clinker handling facilities/emission units (EU26c, EU28, and EU30) are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subparts A and LLL (NESHAP from the Portland Cement Manufacturing Industry) because they are not affected facilities under the regulation.

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) In order to render the requirements of PSD not applicable, to the Permittee's: 1979 pan clinker conveyor modification; 1984 packing machine modification; 1987 roll crusher modification; 1989 finish mill #4 separator modification; and 1993 lime bin modification, respectively, the following conditions shall apply:
 - (1) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.
 - (2) The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.
 - (3) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.
 - (4) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.
 - (5) The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.
 - (6) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.

- (7) The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.
- (b) Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the Kiln #1 and Kiln #2 modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:
- (1) PM and PM10 emissions from Blending Bins (EU13) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC5 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC6.
 - (2) PM and PM10 emissions from Kiln Supply Silos (EU14) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC7 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC8.
 - (3) PM and PM10 emissions from baghouse KDC1 and baghouse KDC3 controlling Kiln #1 Feed Bin (EU18) and Kiln #2 Feed Bin (EU20) respectively shall each not exceed 0.97 pounds per hour.
 - (4) PM and PM10 emissions from baghouse FDC1 controlling South Storage Drag (EU25) shall each not exceed 0.47 pounds per hour.
 - (5) The North Clinker Tower (EU26A), the East Clinker Ladder (EU30) and the Finish Mill Surge Bin (EU37) shall each be limited to 1,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
 - (6) PM and PM10 emissions from baghouse FDC2 controlling North Clinker Tower (EU26A) shall each not exceed 1.76 pounds per hour.
 - (7) PM and PM10 emissions from baghouse FDC3 controlling South Clinker Tower (EU27) shall each not exceed 1.68 pounds per hour.
 - (8) PM and PM10 emissions from baghouse FDC4 controlling Hot Spout Clinker Ladder (EU28) shall each not exceed 1.76 pounds per hour.
 - (9) PM and PM10 emissions from baghouse FDC5 controlling Pan Conveyor (EU29) shall each not exceed 1.70 pounds per hour.
 - (10) PM and PM10 emissions from baghouse FDC6 controlling East Clinker Ladder (EU30) shall each not exceed 1.21 pounds per hour.
 - (11) PM and PM10 emissions from baghouse FDC7 controlling Roll Crusher (EU31) shall each not exceed 1.84 pounds per hour.
 - (12) PM and PM10 emissions from baghouse FDC8, baghouse FDC9 and baghouse FDC10 controlling Finish Mill #1 (EU32), Finish Mill #2 (EU33) and Finish Mill #3 (EU34) respectively shall each not exceed 1.42 pounds per hour.
 - (13) PM and PM10 emissions from baghouse FDC11 controlling Finish Mill #4 (EU35) shall each not exceed 0.64 pounds per hour.
 - (14) PM and PM10 emissions from baghouse FDC12 controlling Finish Mill #4 Separator (EU36) shall each not exceed 3.27 pounds per hour.

- (15) The Lime Bin (EU38) shall be limited 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
- (16) PM and PM10 emissions from baghouse FDC14 controlling Lime Bin (EU38) shall each not exceed 0.22 pounds per hour.
- (17) PM and PM10 emissions from baghouse FDC13 controlling Finish Mill Surge Bin (EU37) shall each not exceed 0.49 pounds per hour.
- (18) PM and PM10 emissions from baghouse SDC1 and baghouse SDC2 controlling North Silo Operation (EU39A) and South Silo Operation (EU39B) respectively shall each not exceed 1.77 pounds per hour .
- (19) PM and PM10 emissions from baghouse SDC3 and baghouse SDC4 controlling Silo Transfer - East (EU40A) and Silo Transfer - West (EU40B) respectively shall each not exceed 0.57 pounds per hour.
- (20) PM and PM10 emissions from baghouse SDC5 and baghouse SDC7 controlling East Truck Loadout Bin (EU41) and West Truck Loadout Bin (EU43) respectively shall each not exceed 0.43 pounds per hour.
- (21) PM and PM10 emissions from baghouse SDC6 and baghouse SDC8 controlling East Vacuolader (EU42) and West Vacuolader (EU44) shall each not exceed 0.22 pounds per hour.
- (22) The Railroad Loadout Bin (EU45) and the Articulator (EU46) shall be limited to 2,000 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
- (23) PM and PM10 emissions from baghouse SDC9 controlling Railroad Loadout Bin (EU45) shall each not exceed 0.71 pounds per hour.
- (24) PM and PM10 emissions from baghouse SDC10 controlling Articulator (EU46) shall each not exceed 0.21 pounds per hour.
- (25) The Packing Machine (EU47) shall be limited to 5,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
- (26) PM and PM10 emissions from baghouse SDC11 and baghouse SDC12 controlling Packing Machine (EU14) shall each not exceed 1.84 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification

D.3.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for all control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.3.10 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition D.3.4 by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (b) Within 60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2, in order to demonstrate compliance with Condition D.3.1(k), (l), (m), (n), (o) and D.3.6, the Permittee shall perform PM and PM10 testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), Finish Mill #4 (EU35) and the finish mill #4 separator (EU36). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM10 includes filterable and condensable PM10. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.3.9 Particulate Control

Pursuant to CP093-2770 issued March 3, 1993, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to demonstrate compliance with Conditions D.3.1, D.3.4, and D.3.6.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.3.4; and
 - (2) Procedures to be used to periodically monitor the affected facilities, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test on each stack exhaust (S-RMDC5 through S-RMDC8, S-KDC1, S-KDC3, S-KDC5, S-FDC1 through S-FDC3, S-FDC5, S-FDC7, S-FDC13, and S-SDC1 through S-SDC12) associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the

conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish material storage facilities/emission units (EU37, EU39A, EU39B, EU40A, and EU40B), the bulk loading and packaging facilities/emission units (EU41 through EU47), the lime bin (EU38), and the truck loadout station (F06) in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the source is in operation.

- (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

- (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any

stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

D.3.11 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) shall be performed once per day during normal daylight operations. Visible emission notations of all other baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) On days that the NESHAP monitoring required in Condition D.3.10 is performed, the Permittee may use those results to satisfy the requirements of this condition for those facilities monitored.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) at least once per day when the associated facility/emission units are in operation and venting to the atmosphere. The Permittee shall record the total static pressure drop across all other baghouses at least once per shift when the associated facility/emission units are in operation and venting to the atmosphere. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.13 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the process listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.3.14 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.15 Record Keeping Requirements

- (a) To document compliance with Condition D.3.11, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47) once per day and all other baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.3.12, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47)

once per day and all other baghouses once per shift.

- (c) To document compliance with Condition D.3.13, the Permittee shall maintain records of the results of the inspections required under Condition D.3.13.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a), recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (e) To document compliance with Condition D.3.6(b)(5), (15), (22) and (25), the Permittee shall maintain records of the North Clinker Tower (EU26A), the East Clinker Ladder (EU30), the Finish Mill Surge Bin (EU37), the Lime Bin (EU38), the Railroad Loadout Bin (EU45), the Articulator (EU46) and the Packing Machine (EU47) operating hours.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.16 Reporting Requirements

- (a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.3.10 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.

- (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:
- United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
- Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) A quarterly summary of the information to document compliance with Condition D.3.6 (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

- (1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) and SO₂ emissions controlled by a Water Spray Tower, identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) and SO₂ emissions controlled by a Water Spray Tower, identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (3) One (1) kiln #3, identified as EU17, constructed in 1974 as a one-stage preheater kiln, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirement of 326 IAC 2-2 (PSD) not applicable to the preheater modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

- (a) The Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16) shall be limited to 321,875 tons each per 12 consecutive month period with compliance determined at the end of each month.
- (b) PM emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.28 lb/ton clinker.
- (c) PM₁₀ emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.59 lb/ton clinker.
- (d) NO_x emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 11.14 lb/ton clinker.
- (e) CO emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.67 lb/ton clinker.

- (f) SO₂ emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 7.51 lb/ton clinker.
- (g) VOC emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.30 lb/ton clinker.
- (h) Lead emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.69E-03 lb/ton clinker.
- (i) Sulfuric Acid mist emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 3.9E-02 lb/ton clinker.
- (j) H₂S emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.037 lb/ton clinker.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

D.4.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of coal in each of the kilns shall not exceed six (6.0) pounds per MMBtu heat input each. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a monthly average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.4.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.4.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) shall be limited as follows:

- (a) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln.
- (b) Visible emissions shall be limited to twenty percent (20%) opacity.
- (c) Dioxin/Furan emissions shall be limited to 8.7×10^{-11} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen; or 1.7×10^{-10} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or less.
- (d) The kiln shall be operated such that the three hour rolling average temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.4.7.

On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.4.5 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

IDEM has determined that a Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the one-stage preheater kiln #1 (EU15), and the one-stage preheater kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions D.4.1 and D.4.2. A CAM plan was received from the source on December 19, 2002. IDEM has determined that compliance with the monitoring requirements of 40 CFR 63.8(c), Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64.

D.4.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each of the kilns facilities/emissions units and the control devices KP1, KP2, and KP3. If the Operations and Maintenance Plan required by Condition D.4.12 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.4.7 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM shall be repeated at least once every 5 years and the tests for dioxin/furans shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test that may adversely affect compliance with the applicable particulate matter or dioxins/furans limits. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.
- (b) Pursuant to 40 CFR 63.7, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of startup of preheater Kilns #1 and #2

D.4.8 Testing requirement [326 IAC 2-1.1-11]

To verify compliance with condition D.4.1, the permittee shall, within 60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2, perform PM, PM₁₀, NO_x, CO, SO₂, VOC, Sulfuric Acid mist, H₂S and Lead testing on Kiln #1 (EU15) and Kiln #2 (EU16). The PM, PM₁₀, NO_x, CO, SO₂, VOC, Sulfuric Acid mist, H₂S, and Lead testing for Kilns #1 and #2 shall be repeated every 2.5 years from the Permittee's initial compliance demonstration for each of these pollutants following start-up of the preheater Kilns #1 and #2.

D.4.9 Particulate Control

Except as otherwise provided by statute, rule or this permit, the ESPs (KP1, KP2, and KP3) for PM control shall be in operation at all times when the associated kiln is in operation, in order to demonstrate compliance with Conditions D.4.1 and D.4.4.

D.4.10 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions

from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
 - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
 - (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e);
 - (2) Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
 - (3) Sample and analyze the coal pursuant to 326 IAC 3-7-3.
- (b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the kilns in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

D.4.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from the stacks associated with each of the kilns (S-KP1 and S-KP2), pursuant to 326 IAC 3-5-2 and 40 CFR 63.8(c). The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Condition D.4.7. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.12 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL] [40 CFR 64.2]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17). The plan shall include the following information:
 - (1) Procedures for proper operation and maintenance of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) and associated air pollution control device(s) in order to meet the emissions limit in Condition D.4.4; and
 - (2) Procedures to be used during an inspection of the components of the combustion system of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at least once per year.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) The Permittee shall conduct an inspection of the components of the combustion system of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at least once per year.
- (c) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition D.4.11 shall be used to monitor opacity emissions in accordance with the NESHAP 40 CFR 63, Subpart LLL and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A.
- (d) The Permittee shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at the inlet to, or upstream of the kiln's PM control device.
 - (1) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).
 - (2) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the IDEM.
 - (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
 - (5) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

Recording the temperature of the exhaust gases from kiln #1 (EU15) and kiln #2 (EU16) shall

satisfy the requirement of the Compliance Assurance Monitoring (CAM) Plan for SO₂ emissions monitoring, in accordance with the requirements of 40 CFR 64.

D.4.13 Preventive Inspections

In order to document compliance with the applicable PM and dioxin/furan limits specified in Condition D.4.1 and Condition D.4.4 the following inspections shall be performed for each ESP:

- (1) Electrostatic precipitator, transformer-rectifier set ("T-R set") component inspections shall be performed during each annual shutdown, but no less often than once every fourteen (14) months, and during any outage lasting more than five (5) days, unless such inspections have been performed within the last six (6) months. The inspections shall include the following:
 - (A) Internal inspections of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).
 - (B) Effectiveness of rapping (including but not limited to a visual check of dust buildup on discharge electrodes and plates).
 - (C) Gas distribution (including but not limited to a visual check of dust buildup on distribution plates and turning vanes).
 - (D) Dust accumulation (including but not limited to a visual check of dust buildup on shell and support members that could result in grounds or promote advanced corrosion).
 - (E) Major misalignment of plates and electrodes (including but not limited to a visual check of plate and electrode alignment).
 - (F) Rapper, electric hammer, and T-R set control cabinets (including but not limited to motors and lubrication).
 - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water and air lines, and solenoids).
 - (H) Electric hammer and rapper boots (including but not limited to air in-leakage, wear and deterioration).
 - (I) T-R set controllers (including but not limited to voltage and current setpoints).
- (2) Air and water infiltration, once per month. This inspection may consist of audible checks around hoppers/hatches, duct expansion joints, and areas of corrosion.

D.4.14 Parametric Monitoring

- (a) The ability of the ESPs to control particulate emissions shall be monitored once per day when the units are in operation, by measuring and recording and comparing the total power of the ESP to the minimum total power of thirty-five kilowatts (35 kW).
- (b) When for any reading, the total power is below the minimum total power of 35 kW, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A total power reading below the minimum is not a deviation from this permit.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a

violation of this permit.

D.4.15 Opacity Readings

The ability of the ESP to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the kiln stack exhausts (S-KP1 and S-KP2).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds 18 percent for three (3) consecutive six (6) minute averaging periods. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition D.4.11.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.16 Record Keeping Requirements

- (a) In order to document compliance with Conditions D.4.2 and D.4.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.4.2.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual monthly coal usage since last compliance determination period;
 - (3) Calendar month average sulfur content and heat content of coal;
 - (4) Calendar month average sulfur dioxide emission rates in pounds per million Btu of heat input.

326 IAC 7-1.1, 7-2-1, and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

- (b) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (c) To document compliance with Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.12, D.4.14, and D.4.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.13, D.4.14, and D.4.15.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
 - (3) All ESP total power readings.
 - (4) The results of all ESP inspections and the type and number of parts

replaced.

- (5) All preventive maintenance measures taken.
- (6) All response steps taken and the outcome for each.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (4) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
 - (5) The Permittee shall keep records of the results of the inspections of the components of the combustion systems of kilns #1, #2, and #3, required by 40 CFR 63.1350 and Condition D.4.12(b), at least once per year.
- (e) To document compliance with the CAM record keeping requirements in 40 CFR 64.9, the permittee shall maintain the following records on site:
 - (1) Monitoring data.
 - (2) Monitor Performance Data.
 - (3) Corrective Action Taken.
- (f) To document compliance with Condition D.4.1, the Permittee shall maintain records of the Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16).
- (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.17 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with the SO₂ limit specified in Condition D.4.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. This report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63, Subpart A.

- (c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:
- (1) All exceedances of maximum control device inlet gas temperature limits specified in Condition D.4.4.
 - (2) All failures to verify the calibration of the thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(6).
 - (3) The results of any combustion system component inspections conducted within the reporting period as required by Condition D.4.12(b).
 - (4) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.

- (d) To document compliance with the NESHAP, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
- (1) The plan required by Condition D.4.12 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not

following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

- (e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (f) To document compliance with the reporting requirements in 40 CFR 64.9(a)(2), the permittee shall report the information required by this rule, including but not limited to:
- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions and exceedances, as applicable, and the corrective actions taken.
 - (2) Summary information on the number, duration and cause including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable)
- (g) A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The clinker cooler facilities/emissions units, as follows:

- (1) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (1) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (2) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirement of 326 IAC 2-2 (PSD) not applicable to the Kiln preheater modification, upon startup of the preheater Kilns #1 and #2, PM and PM10 emissions from baghouse KDC2 and baghouse KDC4 controlling Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU20) respectively shall each not exceed 11.41 pounds per hour. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

D.5.2 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]

The clinker coolers #1 and #2 (EU19 and EU21) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they were constructed prior to the applicability date of August 17, 1971 and have not been modified since the applicability date.

D.5.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the clinker coolers (EU19, EU21 and EU23) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.5.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, each clinker cooler (EU19, EU21 and EU23) shall be limited as follows:

- (a) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.
- (b) Visible emissions shall be limited to ten percent (10%) opacity.

On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject

to the opacity limit in this condition.

D.5.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities/emissions units and their control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.5.10 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.5.6 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM and opacity limits established in Condition D.5.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The PM tests shall be repeated at least once every 5 years from the date of this valid compliance demonstration.

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

The Permittee shall demonstrate compliance with the PM and PM10 limits established in condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2, by conducting performance tests for PM and PM10 from clinker coolers, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. The PM and PM10 tests for all three Clinker Coolers shall be conducted every 2.5 years. PM 10 includes filterable and condensible PM10.

D.5.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). 326 IAC 3-5 is not federally enforceable.
- (a) The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

D.5.9 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse (KDC2, KDC4 and KDC6) for PM control shall be in operation at all times when its associated clinker cooler is in operation, in order to demonstrate compliance with Condition D.5.1 and D.5.4.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for the clinker coolers (EU19, EU21 and EU23). The plan shall include the procedures for proper operation and maintenance of the clinker coolers (EU19, EU21 and EU23) and associated air pollution control device(s) in order to meet the emissions limit in Condition D.5.4. Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition D.5.8 shall be used to monitor opacity emissions in accordance with the NESHAP and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A and according to 40 CFR 60, Appendix B, PS-1.

D.5.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across each clinker cooler baghouse (KDC2, KDC4 and KDC6), at least once per day when the associated facility/emissions unit is in operation and venting to the atmosphere. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the processes listed in this section when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.5.13 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.5.14 Opacity Readings

The ability of the baghouses to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the clinker cooler stack exhausts

(S-KDC2, S-KDC4, and S-KDC6).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds 8 percent for three (3) consecutive six (6) minute averaging periods. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition D.5.8.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.15 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.4, D.5.6, D.5.7, and D.5.8, the Permittee shall maintain records in accordance with (1) and (2) below.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
- (b) To document compliance with Condition D.5.11, the Permittee shall maintain records of the differential static pressure of each baghouse once per day.
- (c) To document compliance with Condition D.5.12, the Permittee shall maintain records of the results of the inspections required under Condition D.5.12.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.16 Reporting Requirements

- (a) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7 and 40 CFR 63.10, from the continuous monitoring system shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. If applicable, the excess opacity summary shall also be submitted in accordance with 40 CFR 63.1354(8) (beginning June 14, 2002).

- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63, Subpart A.
- (c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a). If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.5.10 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activity

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 including one parts washer constructed in 1991.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.6.2 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser facility, constructed after July 1, 1990, The Permittee shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility, construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.6.3 Determination of Nonapplicability [40 CFR 63.460 (Subpart T)] [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the parts washers specifically listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 20-1, 40 CFR 63.460 (Subpart T) because they do not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.
- (b) The parts washers at this source are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not considered affected facilities under this rule.
- (c) The parts washers at this source are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not considered affected facilities under this rule.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- ☐ Annual Compliance Certification Letter
- ☐ Test Result (specify) _____
- ☐ Report (specify) _____
- ☐ Notification (specify) _____
- ☐ Affidavit (specify) _____
- ☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

This form consists of 2 pages

Page 1 of 2

- ☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - The Permittee must submit notice by mail or facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report for Use When Combusting Coal

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Kilns #1, 2, and 3
Parameter: Sulfur Dioxide (SO₂) from coal combustion
Limit: 6.0 pounds per million Btu heat input

FACILITY: _____ YEAR: _____

Month	Monthly Average Coal Sulfur Content (%)	Monthly Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Primary crusher (EU01)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Surge Bin and Transfer System (EU02)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Secondary Crusher (EU03)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Tertiary Crusher (EU04)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The North Screen House (EU05)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The South Screen House (EU06)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Belt 7/8 Conveyor Transfer Point (EU07)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: The Belt 8/9 Conveyor transfer point (EU08)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Conveying System to Transport Raw Material to Storage (EU09)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Shale Crusher (EU10)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: North Clinker Tower (EU26A)
Parameter: Operating Time
Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: East Clinker Ladder (EU30)
Parameter: Operating Time
Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Lime Bin (EU38)
Parameter: Operating Time
Limit: 2,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Finish Mill Surge Bin (EU37)
Parameter: Operating Time
Limit: 1,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Railroad Loadout Bin (EU45) and Articuloader (EU46)
Parameter: Operating Time
Limit: 2,000 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 1	Column 2	Column 1 + Column 2
	This Month	This Month	Previous 11 Months	12 Month Total
Month 1	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			
Month 2	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			
Month 3	Railroad Loadout Bin (EU45)			
	Articuloader (EU46)			

- ☐ No deviation occurred in this quarter.
- ☐ Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Packing Machine (EU47)
Parameter: Operating Time
Limit: 5,500 hours per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Kiln #1 (EU15) and Kiln #2 (EU16)
Parameter: Throughput
Limit: 321,875 tons each per 12 consecutive month period with compliance determined at the end of each month

YEAR: _____

Month	Facility	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Kiln #1			
	Kiln #2			
Month 2	Kiln #1			
	Kiln #2			
Month 3	Kiln #1			
	Kiln #2			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Lehigh Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification.

Source Background and Description

Source Name:	Lehigh Cement Company
Source Location:	121 North First Street, Mitchell, IN 47446
County:	Lawrence
SIC Code:	3241
Operation Permit No.:	T 093-5990-00002
Operation Permit Issuance Date:	December 30, 2002
Significant Source Modification No.:	093-15822-00002
Significant Permit Modification No.:	093-16851-00002
Permit Reviewer:	Ghassan Shalabi

On May 10, 2003, the Office of Air Quality (OAQ) had a notice published in The Times-Mail in Bedford, Indiana, stating that Lehigh Cement Company had applied for a modification application relating to the modification of the following emission units and pollution control devices:

- (a) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) and SO₂ emissions controlled by a Water Spray Tower, identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (b) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) and SO₂ emissions controlled by a Water Spray Tower, identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

Lehigh proposed to convert Kilns #1 and #2 from long-dry process to one-stage preheater process.

The public notice also stated that the IDEM, OAQ proposed to issue the Modification permit for this operation and provided information on how the public could review the proposed approval and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

- (A) The OAQ made the following revisions. (Language deleted is shown with strikeout and that added is shown in bold):

1. The duty to supplement an application is not an ongoing requirement after the permit is issued. Therefore, condition B.7 was changed as follows:

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

~~(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:~~

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

~~The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

~~(b)~~ **(a)** The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

~~(c)~~ **(b)** The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

2. B.11 (b) was revised to clarify that required record keeping needs to be implemented as well as the rest of the plan to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit. Also, (c) has been revised to clarify that OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The requirement to keep records of preventive maintenance in (d) has been moved to Section D. Because the general record keeping requirements (ie retained for 5 years) are in Section C, it is not necessary to include them in this condition or in the D condition. At some sources, an OMM Plan is required. Instead of having two separate plans, the OMM Plan may satisfy the PMP requirements, so (d) has been added to this condition. Therefore, condition B.11 is changed as follows:

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility/emissions unit:

- (1)** Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
- (2)** A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
- (3)** Identification and quantification of the replacement parts that will be maintained in

inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, **including any required record keeping**, as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation **an exceedance** of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or ~~contributes to any violation~~ **is the primary contributor to an exceedance of any limitation on emissions or potential to emit**. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- ~~(d) Pursuant to 326 IAC 2-7-5(3)(B), records of preventive maintenance performed pursuant to the PMP shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~
- (d) **To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.**

3. In order to clarify that an amendment or modification will not be required for the addition, operation or removal of a nonroad engine, condition B.18 was changed as follows:

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the ~~A~~responsible official~~@~~ as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request.

[326 IAC 2-7-11(c)(3)]

- (d) **No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.**

4. For clarity, additional rule cites have been added to B.22 Inspection and Entry. Therefore, condition B.22 is changed as follows:

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have** ~~Have~~ access to and copy any records that must be kept under the conditions of this permit;
 - (c) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect** ~~inspect~~ any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) As authorized by the Clean Air Act, **IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, or** ~~Indiana statute or regulation,~~ sample or monitor, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) **As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize** ~~utilize~~ any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
5. The following change has been made to C.1 Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) Pounds Per Hour:
- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]**
-
- (a) Pursuant to 40 CFR 52 Subpart P, ~~the allowable~~ particulate emissions ~~rate~~ from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) Pursuant to 326 IAC 6-3-2(e)(2), ~~the allowable~~ particulate emissions ~~rate~~ from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.
6. To clarify that the requirement to have an Indiana Accredited Asbestos inspector is not federally enforceable, condition C.8 is changed and a new condition regarding Demolition and Renovation was added to it as follows:

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(f) **Demolition and renovation**

The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

~~(f)~~(g) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. ~~The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.~~ **The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.**

7. To further clarify its requirements, condition C.11 is changed as follows:

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring requirements not already legally required shall be implemented within ninety (90) days of **the original Part 70** permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new **or modified** facilities/emission units, compliance monitoring for new **or modified** facilities/emission units or facilities/emission units added **or modified** through a source modification shall be implemented when operation begins.

8. It is sufficient for specific conditions to require the Permittee to take corrective action and based on the April 16, 2003 Joint Stipulation of Stay of Effectiveness, condition C.12 is changed as follows:

C.12 Maintenance of **Continuous** Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

~~(b)~~ The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitors (COMS) and related equipment. ~~In addition, prompt corrective action shall be initiated whenever indicated.~~

(b) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Whenever a continuous opacity monitor (**COM**) is malfunctioning or will be down for calibration, maintenance, or repairs for a period of ~~four (4) hours~~ **one (1) hour** or more, a ~~calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible.~~ **visible emission readings shall be**

~~performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour, beginning four (4) hours after the start of the malfunction or down~~
compliance with the applicable opacity limits shall be demonstrated by the following:

- (1) ~~If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.~~ **Visible emission (VE) notations shall be performed once per hour during daylight operations following the shutdown or malfunction of the COM. A trained employee shall record whether emissions are normal or abnormal at the time of the reading.**
 - (A) **A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. Permittee may also use an independent contractor who has been trained in the appearance and characteristics of normal visible emissions for that specific process.**
 - (B) **If abnormal emissions are noted during two (2) consecutive VE notations, the Permittee shall begin opacity observations in accordance with 40 CFR Part 60, Appendix A, Method 9, within four (4) hours of the second abnormal VE notation.**
 - (C) **VE notations may be discontinued once a COM is online or formal Method 9 readings have been implemented.**
- (2) ~~Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.~~ **If a COM is not online within twenty-four (24) hours of shutdown or malfunction of the COM, the Permittee shall provide certified opacity reader(s), who may be employees of the Permittee or independent contractors, to self-monitor opacity from the stack.**
 - (A) **Visible Emission readings shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.**
 - (B) **Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least once every four (4) hours during daylight operations, until such time that a COM is in operation.**
 - (C) **Method 9 opacity readings may be discontinued once COM is online.**
- (3) **All of the Method 9 opacity readings taken during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports Summary of Opacity Emissions.**

9. So that it is more straightforward, condition C.16 is changed as follows:

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.245]

If a regulated substance, ~~subject to as defined in 40 CFR 68,~~ is present at a source in more than a threshold quantity, ~~40 CFR 68 is an applicable requirement and the Permittee shall submit:~~ **the source must comply with the applicable requirements of 40 CFR 68.**

~~(a) A compliance schedule for meeting the requirements of 40 CFR 68; or~~

~~(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP)~~

~~All documents submitted pursuant to this condition shall include the certification by the responsible official as defined by 326 IAC 2-7-1(34).~~

10. Some sources are required to have an Operation, Maintenance and Monitoring (OMM) Plan or Start-up, Shutdown, and Malfunction (SSM) Plan. Instead of having an additional plan, it has been determined that having an OMM can satisfy the requirements for having a CRP. If a source is required to have an SSM Plan, a Parametric Monitoring Plan would also be required to satisfy the requirements to have a CRP. Additional language has been added for these options. Failure to take reasonable response steps shall be considered deviation of the permit; therefore, (b)(4) was revised. Language was added to (e) to clarify that the records that need to be kept are those instances when, in accordance with Section D, response steps are taken. Therefore, condition C.17 is changed as follows:

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. **If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions.** A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan** and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan** to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan**; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan **or Operation, Maintenance and Monitoring (OMM) Plan** is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall ~~constitute a violation~~ **be considered deviation** of the permit.
 - (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within ~~normal~~ parameters and no response steps are required.
 - (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
 - (e) The Permittee shall record all instances when, **in accordance with Section D**, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
 - (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.
11. In order to clarify which documents need to be certified by the responsible official, condition C.18 was changed as follows:

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. Upon request, the Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility/emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The **response action** documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

12. To include the specific rule cite that defines the regulated pollutants being referred, condition C.19 is changed as follows:

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of ~~other~~ regulated pollutants (as defined by 326 IAC 2-7-1(32)) **(Regulated pollutant which is used only for purposes of Section 19 of this rule)** from the source, for purposes of Part 70 fee assessment.

13. It is acceptable for records to be electronically accessible instead of being physically present at a source. Therefore, condition C.20 is changed as follows:

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required **monitoring** data, reports, and support information **required by this Permit** shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be ~~kept~~ **physically present or electronically accessible** at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

14. The quarterly inspections do not need to be conducted in the last month of the quarter, but they should not occur in consecutive months. Therefore, condition D.1.9, D.2.14, D.3.13 and D.5.12 are changed as follows:

D.1.9 Baghouse Inspections

An inspection shall be performed ~~within the last month of~~ each calendar quarter of all bags controlling the **process listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.** All defective bags shall be replaced.

D.2.14 Baghouse Inspections

An inspection shall be performed ~~within the last month of~~ each calendar quarter of all bags controlling the **processes listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.** All defective bags shall be replaced.

D.3.13 Baghouse Inspections

An inspection shall be performed ~~within the last month of~~ each calendar quarter of all bags controlling the **processes listed in this section when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. Inspections required by this condition shall not be performed in consecutive months.** All defective bags shall be replaced.

D.5.12 Baghouse Inspections

An inspection shall be performed ~~within the last month of~~ each calendar quarter of all bags controlling the **processes listed in this section when venting to the atmosphere. Inspections required by this condition shall not be performed in consecutive months.** All defective bags shall be replaced.

15. To reference the correct conditions, conditions D.1.11 and D.1.12 are changed as follows:

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3(b)(1), the Permittee shall maintain records of the Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) operating hours.
- (b) To document compliance with Condition ~~D.1.6~~ **D.1.7**, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the differential static pressure of each baghouse once per shift.
- (d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 (b)(1) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the

certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

16. Based on the April 16, 2003 Joint Stipulation of Stay of Effectiveness, condition D.4.13 is changed as follows:

D.4.13 Preventive Inspections

In order to document compliance with the applicable PM and dioxin/furan limits specified in Condition D.4.1 and Condition D.4.4 the following inspections shall be performed for each ESP during each annual shutdown, but no less often than once every 14 months, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:

- (a) ~~Plate and electrode alignment;~~
- (b) ~~ESP component/controller failure;~~
- (c) ~~Air and water infiltration; and~~
- (d) ~~Calibration of the instruments used to determine the T-R set current and voltages.~~

~~All inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.~~

~~Appropriate response steps for any failures, malfunctions, or abnormal conditions in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~

- (1) Electrostatic precipitator, transformer-rectifier set ("T-R set") component inspections shall be performed during each annual shutdown, but no less often than once every fourteen (14) months, and during any outage lasting more than five (5) days, unless such inspections have been performed within the last six (6) months. The inspections shall include the following:**
 - (A) Internal inspections of shell for corrosion (including but not limited to doors, hatches, insulator housings, and roof area).**
 - (B) Effectiveness of rapping (including but not limited to a visual check of dust buildup on discharge electrodes and plates).**
 - (C) Gas distribution (including but not limited to a visual check of dust buildup on distribution plates and turning vanes).**
 - (D) Dust accumulation (including but not limited to a visual check of dust buildup on shell and support members that could result in grounds or promote advanced corrosion).**
 - (E) Major misalignment of plates and electrodes (including but not limited to a visual check of plate and electrode alignment).**
 - (F) Rapper, electric hammer, and T-R set control cabinets (including but not limited to motors and lubrication).**
 - (G) Rapper assembly (including but not limited to loose bolts, ground wires, water and air lines, and solenoids).**
 - (H) Electric hammer and rapper boots (including but not limited to air in-leakage, wear and deterioration).**

(I) **T-R set controllers (including but not limited to voltage and current setpoints).**

(2) **Air and water infiltration, once per month. This inspection may consist of audible checks around hoppers/hatches, duct expansion joints, and areas of corrosion.**

17. Based on the April 16, 2003 Joint Stipulation of Stay of Effectiveness and First Addendum to the April 16, 2003 Joint Stipulation of Stay of Effectiveness, condition D.4.14 is changed as follows:

D.4.14 Parametric Monitoring

- (a) ~~The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the units are in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.~~ **The ability of the ESPs to control particulate emissions shall be monitored once per day when the units are in operation, by measuring and recording and comparing the total power of the ESP to the minimum total power of thirty-five kilowatts (35 kW).**
- (b) ~~When for any one reading, the voltage or current is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A voltage or current reading outside the normal range is not a deviation from this permit.~~

(1) ~~Primary voltage: 260 – 300 V~~

(2) ~~Secondary voltage: 35 – 55 kV~~

(3) ~~T-R set primary current: 50 – 75 A~~

When for any reading, the total power is below the minimum total power of 35 kW, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. A total power reading below the minimum is not a deviation from this permit.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

18. Based on the April 16, 2003 Joint Stipulation of Stay of Effectiveness, conditions D.2.12, D.2.13, D.3.11, D.3.12, D.3.15, D.5.11, D.5.15 are changed as follows:

D.2.12 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts **controlling the raw mills (EU11, EU11A, EU12 and EU12A)**, shall be performed once per shift day during normal daylight operations. **Visible emission notations of all other baghouse stack exhausts shall be performed once per shift during normal daylight operations.** A trained employee shall record whether emissions from the stacks are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month

and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

- (d) On days that the NESHAP monitoring required in Condition D.2.11 is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse **controlling the raw mills (EU11, EU11A, EU12 and EU12A)** ~~listed in this section~~, at least once per shift day when the associated facility/emissions unit is in operation. **The Permittee shall record the total static pressure drop across all other baghouses listed in this section, at least once per shift when the associated facility/emissions unit is in operation.** When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.11 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts **controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47)** shall be performed once per shift day during normal daylight operations. **Visible emission notations of all other baghouse stack exhausts shall be performed once per shift during normal daylight operations.** A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) On days that the NESHAP monitoring required in Condition D.3.10 is performed, the Permittee may use those results to satisfy the requirements of this condition for those facilities monitored.

- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse associated with **the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47)** ~~the facilities/emissions units listed in this section,~~ at least once per shift day when the associated facility/emission units are in operation and venting to the atmosphere. **The Permittee shall record the total static pressure drop across all other baghouses at least once per shift when the associated facility/emission units are in operation and venting to the atmosphere.** When for any one reading, the pressure drop across ~~each~~ a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.15 Record Keeping Requirements

- (a) To document compliance with Condition D.3.11, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts **controlling the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47)** once per shift day and all other baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.3.12, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse **associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47)** once per shift day and all other baghouses once per shift.

D.5.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across each clinker cooler baghouse (KDC2, KDC4 and KDC6), at least once per shift day when the associated facility/emissions unit is in operation and venting to the atmosphere. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.15 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.4, D.5.6, D.5.7, and D.5.8, the Permittee shall maintain records in accordance with (1) and (2) below.

(1) Data and results from the most recent stack test.

(2) All continuous emissions monitoring data.

- (b) To document compliance with Condition D.5.11, the Permittee shall maintain records of the ~~inlet and outlet~~ differential static pressure of each baghouse once per ~~shift~~ day.

19. To reflect the correct referenced conditions, condition D.2.10, D.4.9, D.5.9 are changed as follows:

D.2.10 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to comply with Conditions D.2.1 ~~and~~, D.2.3 **and D.2.7**.

D.4.9 Particulate Control

Except as otherwise provided by statute, rule or this permit, the ESPs (KP1, KP2, and KP3) for PM control shall be in operation at all times when the associated kiln is in operation, in order to demonstrate compliance with Conditions **D.4.1 and D.4.4**.

D.5.9 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse (KDC2, KDC4 and KDC6) for PM control shall be in operation at all times when its associated clinker cooler is in operation, in order to demonstrate compliance with Condition **D.5.1 and D.5.4**.

20. To clarify the reporting requirements, condition D.3.16(c) is changed as follows:

D.3.16 Reporting Requirements

- (c) A quarterly summary of the information to document compliance with Condition D.3.6 (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The reports submitted by the Permittee ~~does~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

21. To clarify the requirements of the condition, condition D.4.16 was changed as follows:

D.4.16 Record Keeping Requirements

- (a) In order to document compliance with Conditions D.4.2 and D.4.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.4.2.

(1) Calendar dates covered in the compliance determination period;

(2) Actual monthly coal usage since last compliance determination period;

- (3) Calendar month average sulfur content and heat content of coal;
- (4) Calendar month average sulfur dioxide emission rates in pounds per million Btu of heat input.

326 IAC 7-1.1, 7-2-1, and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

- (b) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (c) To document compliance with Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.12, D.4.14, and D.4.15, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and Conditions D.4.4, D.4.7, D.4.8, D.4.11, D.4.13, D.4.14, and D.4.15.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
 - (3) All ESP ~~voltage and current monitoring readings~~ **total power readings**.

22. To add the Water Spray Tower for SO₂ emission control, the Facility/Emissions Unit Description Section in D.4 is changed as follows:

- (1) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) **and SO₂ emissions controlled by a Water Spray Tower**, identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
 - (2) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP) **and SO₂ emissions controlled by a Water Spray Tower**, identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (B) Written comments were received from Lehigh Cement Company on June 11, 2003. These comments and IDEM, OAQ responses, including changes to the permit (where language deleted is shown with strikeout and that added is shown in bold) are as follows:

Significant Permit Modification

Comment 1

Permittee's Name – As noted in Lehigh's December 19, 2001 amendment to its Part 70 Permit Application, all references to "Lehigh Portland Cement Company" in permitting documents (including but not limited to the permits, technical support documents, forms, and issuance letters) should be changed to "Lehigh Cement Company." The IDEM continues to reference the name "Lehigh Portland Cement

Company” throughout the permitting documents, but utilizes the correct name “Lehigh Cement Company” in certain correspondence and in most of the Technical Support Document (“TSD”) for the draft permit modification. To avoid confusion and to make the permit documents accurate, please revise the documents to use the correct name.

Response 1

To reflect the source’s correct name, any reference to “Lehigh Portland Cement Company” in the permit

Regarding references to “Lehigh Portland Cement Company” in the Technical Support Document (TSD), IDEM, OAQ, prefers that the Technical Support Document (TSD) reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. Therefore, this TSD addendum acknowledges the that all references to “Lehigh Portland Cement Company” should have been “Lehigh Cement Company”, however the TSD is not changed.

Comment 2

Table of Contents – Consistent with the unit descriptions in Section D.1 of the draft permit, please modify the title of Section D.1 Facility Operation Conditions in the Table of Contents as follows: “Quarry Activities, Quarry Material Sizing, Cement Kiln Dust Storage, Disposal, Mining, and Handling.”

Response 2

To reflect the correct unit description in section D.1, the Table of Contents is changed as follows:

D.1 FACILITY OPERATION CONDITIONS - Quarry Activities, Quarry Material Sizing, Cement Kiln Dust Storage, **Disposal, Mining**, and Handling

Comment 3

Table of Contents – Consistent with the comments regarding Condition D.2.10 listed below, delete the reference to D.2.10, from the Table of Contents and renumber the remaining D.2 conditions in the Table of Contents accordingly.

Response 3

To reflect the deletion of condition D.2.10 as requested in comment 22, the reference to Condition D.2.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] in the table of contents is deleted and the remaining conditions were renumbered accordingly.

Comment 4

Table of Contents – Consistent with the unit descriptions in Section D.3 of the draft permit, please modify the title of Section D.3 Facility Operation Conditions in the Table of Contents as follows: “Raw Mill Storage, Clinker Handling, Finish Mills, Finish Material Storage, Loading and Packing Facilities.”

Response 4

To reflect the correct unit description in section D.3, the Table of Contents is changed as follows:

D.3 FACILITY OPERATION CONDITIONS - Raw ~~Material~~ **Mill** Storage ~~Facilities~~, Clinker Handling, Finish Mills, Finish Material Storage, **Bulk** Loading and Packaging Facilities

Comment 5

Cover Page, Conditions Affected – Please explain why the IDEM has decided to reissue the entire permit, when the draft permit modification cover page and draft transmittal letter clearly state that only those conditions listed under the heading “Conditions Affected” were modified by the permit modification. Both 326 IAC 2-7-10.5(j) and 326 IAC 2-7-16(c) require adequate procedures for public notice which

undoubtedly would include a clear presentation of the initial Part 70 Permit conditions modified by the draft Significant Permit Modification which would be subject to appeal upon final issuance. Moreover, please explain the types of changes that qualified a condition for inclusion in the list of "Conditions Affected" because several revised conditions appear to have been omitted from the list of conditions affected. For example, changing the condition number (e.g. D.4.2) of an original permit term and modifying the conditions referenced therein would appear to be a modification of the existing Part 70 Operating Permit issued on December 30, 2002. Please modify the "Conditions Affected" section of the cover page of this draft permit and the draft transmission letter consistent with your responses to these comments.

In your response to these comments please also confirm that it is not necessary for Lehigh to repeat the objections included in Lehigh's Petition filed in response to the issuance of the initial Part 70 Operating Permit in any appeal of this preheater permit modification in order to preserve Lehigh's right to continue to seek administrative review of those provisions in the pending appeal, Case No. 03-AJ-3010. As presented, it is unclear which conditions of Lehigh's initial Part 70 Permit the IDEM is seeking to modify, thus making it impossible for Lehigh to determine which provisions it could appeal upon final issuance of the Significant Permit Modification. Additionally, without a clear understanding of which conditions of the initial Part 70 Permit the IDEM intends to modify, Lehigh is not able to determine which issues included in Lehigh's appeal of its initial Part 70 Permit would have to be raised again in an appeal of the Significant Permit Modification to preserve Lehigh's right to continue to contest same. Moreover, it is unclear which alternative permit conditions (if any) set forth in the Stay Agreement will be superseded by the issuance of the Significant Permit Modification.

Response 5

The cover page of the permit indicates the conditions of the original Part 70 permit that are being modified. The entire permit is being reprinted with all changes being incorporated because there are many conditions and pages affected. The pages or conditions of the permit that were unaffected by this modification did not change in status or content, just because they were provided again.

Conditions and sections that were changed have been included in the "Conditions Affected" section of the cover page of the permit and these don't include renumbered conditions resulting from the deletion of previous conditions.

To include conditions changed in this addendum to the TSD, the "Conditions Affected" section in the cover page is changed as follows:

First Significant Permit Modification No.: 093-16851-00002	Conditions Affected: Table of contents, A.2, B.7, B.11, B.12, B.18, B.22, C.1, C.8, C.11, C.12, C.16, C.17, C.18, C.19, C.20, D.1.2, D.1.3, D.1.6, D.1.9, D.1.11, D.1.12, Unit description in D.2, D.2.1, D.2.2, D.2.3, D.2.4, D.2.5, D.2.6, D.2.7, D.2.9, D.2.10, D.2.11, D.2.12, D.2.13, D.2.14, D.2.16, D.2.17, D.2.18, D.3.1, D.3.5, D.3.6, D.3.8, D.3.10, D.3.11, D.3.12, D.3.13, D.3.15, D.3.16, Unit description in D.4, D.4.1, D.4.4, D.4.5, D.4.6, D.4.7, D.4.8, D.4.10, D.4.12, D.4.13, D.4.14, D.4.16, D.4.17, D.5.1, D.5.6, D.5.7, D.5.9, D.5.10, D.5.11, D.5.12, D.5.15, D.5.16, Quarterly Report for Use When Combusting Coal Form
Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

Lehigh's objections stated in the pending appeal, Case No. 03-AJ-3010, are incorporated by reference into the record for this Significant Permit Modification. If Lehigh wishes to appeal conditions that have

changed due to this modification, these conditions will need to be appealed when this modification is issued. If Lehigh has already appealed a condition of the initial Part 70 permit and that condition has not changed in this modification, then there is no need for Lehigh to appeal that same condition again. Regarding the stay agreement, there are 3 scenarios to address:

1. Where the Significant Permit Modification incorporates the exact language from the stay agreement, Lehigh must comply with the language in the Significant Permit Modification. If Lehigh does not agree with complying with that language on a permanent basis, they will have to appeal the Significant Permit Modification language.
2. Where the Significant Permit Modification includes new language that is different from the T5 permit language and different than the stay agreement language, Lehigh must comply with the new language in the Significant Permit Modification.
3. Where the Significant Permit Modification language is different from the stay agreement language, but exactly the same as the original T5 language, Lehigh can continue to comply with the temporary stay agreement language until such time that the stay expires.

Comment 6

Source Summary A.2(v) and Section D.2 Facility/Emission Unit Descriptions – Please be advised that the coal-fired stoker (EU11B and EU12B) and the natural gas-fired burners (EU11A and EU12A) are two separate facilities/emission units. Therefore, in accordance with Lehigh's permit modification application, please delete all requirements included in the draft permit regarding the stoker (EU11B and EU12B) and/or the raw mill heater. In that accord, please delete A.2(v) and facility description (1) under the subheading raw mill facilities/emission units in Section D.2's Facility/Emission Unit Descriptions and number the remaining conditions and cross-references thereto accordingly.

Response 6

To reflect discontinuing the coal usage and the removal of the coal stoker, Section A and Section D.2 were changed as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

~~(v) One (1) stoker for backup heat supply for the raw mills with natural gas-fired burners installed in 1999, identified as EU11A and EU12A, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.~~

Following conditions were renumbered to reflect this change.

SECTION D.2

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The raw mill facilities/emissions units, as follows:

~~(1) One (1) stoker for backup heat supply for the raw mills with natural gas-fired burners installed in 1999, identified as EU11A and EU12A with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.~~

Following conditions were renumbered to reflect this change.

D.2.6 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL] [40 CFR 60, Subpart Y]

- (d) The coal pile (F04) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because it is not considered an affected facility under the regulation. Additionally, facilities/emission units EU09, EU10, F03, F08, F09, EU11A, ~~EU11B~~, EU12A, ~~EU12B~~, EU11, EU12, the three insignificant coal mills, the coal feeder conveyor and the coal unloading conveyor are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are not affected facilities under the rule or they were not constructed or modified after October 24, 1974.

Comment 7

Source Summary A.3 – The title of Source Summary A.3 (specifically the underlining of the citation to 326 IAC 2-7-5(15)), should conform with the formatting of the other permit condition titles.

Response 7

Underlining of A.3 was corrected.

Comment 8

Condition B.12(e) – Condition B.12(e) incorrectly cites to “326 IAC 2-7-4(c)(10).” Consistent with the 2001 modifications to 326 IAC 2-7-4, this condition should reference “326 IAC 2-7-4(c)(9).”

Response 8

To reflect the correct rule citation, condition B.12(e) is changed as follows:

B.12 Emergency Provisions [326 IAC 2-7-16]

- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(~~10~~ **9**) be revised in response to an emergency.

Comment 9

Condition B.18(b) – Please insert a space between “by” and “326 IAC 2-7-1(34)” in the last sentence of Condition B.18(b).

Response 9

Condition B.18(b) had a space between “by” and “326 IAC 2-7-1(34)” in the last sentence of Condition B.18(b). The sentence was correct as public noticed. Therefore, no changes were made due to this comment.

Comment 10

Condition C.18 - The title of Condition C.18 (specifically the underlining of the rule citation) should conform with the formatting of the other permit condition titles.

Response 10

Underlining of C.18 was corrected.

Comment 11

Condition D.1.2(a) – Condition D.1.2(a) contains a typographical error. The condition incorrectly states that none of the facilities/emission units were constructed or modified prior to the applicability date of August 17, 1971. Instead, the last phrase of this condition should state: “because they are not affected facilities that were constructed or modified after the applicability date of August 17, 1971.”

Response 11

To correct a typographical error, condition D.12(a) is changed as follows:

D.1.2 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and

LLL]

-
- (a) None of the facilities/emission units listed in this section are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities that were constructed or modified ~~prior to~~ **after** the applicability date of August 17, 1971.

Comment 12

Condition D.1.3(b) – Condition D.1.3(b) should clarify that the PSD non-applicability limits are pursuant to the preheater modification. Therefore, please restate the first sentence of Condition D.1.3(b) as follows: “Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of the preheater Kilns #1 and #2.”

Response 12

To clarify that the PSD non-applicability limits are pursuant to the preheater modification, condition D.1.3(b) is changed as follows:

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (b) **Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in** order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply **upon startup of either preheater Kilns #1 or #2:**

Comment 13

Condition D.1.3(b)(7) – Condition D.1.3(b)(7) should reference the “CKD Truck Unloading” rather than

Response 13

To reflect the correct emission unit description and the correct rule citation and for further clarification, condition D.1.3(b)(7) is changed as follows:

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (b) Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:
- (4) PM and PM10 emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) and from baghouse QDC6 controlling the South Screen House (EU06) shall **each** not exceed 1.44 pounds per hour.
 - (5) PM and PM10 emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.
 - (6) PM and PM10 emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.
 - (7) PM and PM10 emissions from baghouse KDC7A controlling the CKD Truck ~~Unloading~~ **Unloading** System (EU24A) shall each not exceed 0.36 pounds per hour.
 - (8) PM and PM10 emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and ~~40 CFR 52.21~~ are not applicable to the preheater modification.

Comment 14

Condition D.1.6 – Please delete Condition D.1.6. Most of the emission units listed in Condition D.1.6 are accepting hour of operation limits, only operate one shift per day, are 5,000 ACFM or less, and are not applicable to a New Source Performance Standard (NSPS) or a National Emissions Standards for Hazardous Air Pollutants (NESHAP). In addition, most of the Quarry Material Sizing Facilities/Emission Units vent inside a partially enclosed building.

Response 14

Pursuant to 326 IAC 2-1.1-11, IDEM has the authority to request Lehigh to perform any stack testing that is necessary to show compliance with limits established in order to render the requirements of PSD not applicable. IDEM agrees to delete some but not all of the testing requirements in this condition. Additionally, IDEM will delete the requirement to repeat these tests every 5 years. To clarify its requirements, condition D.1.6 is changed as follows:

D.1.6 Testing requirement **[326 IAC 2-1.1-11]**

To verify compliance with condition D.1.3(b), the permittee shall, within **60 days after achieving the maximum capacity but no later than** 180 days after startup of **preheater** Kiln #1 (EU15) and Kiln #2 (EU16), perform PM and PM10 testing on ~~the Primary Crusher (EU01), the Surge Bin and Transfer System (EU02), Belt #7 to Belt #8 Conveyor Transfer Point (EU07), Belt #8 to Belt #9 Conveyor Transfer Point (EU08), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the South Screen House (EU06), and the North Screen House (EU05), the Cement Kiln Dust Bin (EU24), the CKD Truck Uploading System (EU24A) and Mixer (EU24B)~~ utilizing methods as approved by the Commissioner. ~~These tests shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration.~~ Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit. **PM10 includes filterable and condensible PM10.**

Comment 15

Condition D.1.11(c) - Condition D.1.11(c) should reference Condition D.1.8 rather than Condition D.1.7.

Response 15

To reference the correct condition and to correct the record keeping requirements, condition D.1.11(c) is changed as follows:

D.1.11 Record Keeping Requirements

- (c) To document compliance with Condition ~~D.1.7~~ **D.1.8**, the Permittee shall maintain records of the ~~inlet and outlet~~ differential static pressure of each baghouse once per shift.

Comment 16

Condition D.1.11(d) – The references to “D.1.8” in Condition D.1.11(d) should be changed to “D.1.9.”

Response 16

To reference the correct condition, condition D.1.11(d) is changed as follows:

D.1.11 Record Keeping Requirements

- (d) To document compliance with Condition ~~D.1.8~~ **D.1.9**, the Permittee shall maintain records of the results of the inspections required under Condition ~~D.1.8~~ **D.1.9**.

Comment 17

Conditions D.2.1(c) and (d) – Since Lehigh has agreed to take the coal-fired stoker (EU11B and EU12B) out of operation, please delete the references to EU11B and EU12B in Conditions D.2.1(c) and (d). Additionally, since 326 IAC 6-3 excludes combustion for indirect heating, the references to the natural gas-fired burners (EU11A and EU12A), the indirect heating source for the raw mills, should also be deleted from Conditions D.2.1(c) and (d).

Response 17

The gas fired burners will not be deleted as requested because they are part of the raw mill process. To reflect discontinuing the coal usage and the removal of the coal stoker (EU11B and EU12B), condition D.2.1 is changed as follows:

D.2.1 Particulate [326 IAC 6-3-2]

- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #1 (EU11, ~~and EU11A and EU11B~~) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #2 (EU12, ~~and EU12A and EU12B~~) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.

Comment 18

Condition D.2.3 – Since Lehigh has agreed to take the coal-fired stoker (EU11B and EU12B) out of operation, delete the references to EU11B and EU12B in Condition D.2.3.

Response 18

To reflect discontinuing the coal usage and the removal of the coal stoker, condition D.2.3 is changed as follows:

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, ~~EU11B~~, EU12 ~~and EU12A and EU12B~~) shall each not exceed ten percent (10%) opacity. On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

Comment 19

Condition D.2.5 – Since Lehigh has requested that the coal-fired stoker (EU11B and EU12B) be deleted from the permitted emission units, reword Condition D.2.5 as follows:

Pursuant to minor source modification 093-10597 issued March 1, 1999, the natural gas-fired burners (EU11A and EU12A) were not to operate at the same time as the then existing 37 million Btu per hour coal-fired stoker. Therefore, the addition of the natural gas-fired burners did not result in an emissions increase for the system. Thus, 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subparts A and F do not apply to the raw mills (EU11 and EU12) or the natural gas-fired burners (EU11A and EU12A).

Response 19

To reflect discontinuing the coal usage and the removal of the coal stoker, condition D.2.5 is changed as follows:

D.2.5 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the natural gas-fired burners (EU11A and EU12A) ~~shall~~ **were not to operate at the same time as the then existing 37 million Btu per hour coal-fired stoker (EU11B and EU12B).** Therefore, ~~there is no emissions increase for the system~~ **the addition of the natural gas-fired burners did not result in an emissions increase for the system** and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subparts A and F, will not apply to the raw mills (EU11 and EU12), ~~the coal stoker (EU11B and EU12B),~~ or the natural gas-fired burners (EU11A and EU12A) **as a result of this modification.**

Comment 20

Condition D.2.7 – Condition D.2.7 should clarify that the PSD non-applicability limits are pursuant to the preheater modification. Therefore, please restate the first sentence of Condition D.2.7 as follows: “Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of the preheater Kilns #1 and #2.”

Response 20

To clarify that the PSD non-applicability limits are pursuant to the preheater modification, condition D.2.7 is changed as follows:

D.2.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

- (a) The Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) shall each be limited to 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.
- (b) PM and PM10 emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.
- (c) PM and PM10 emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.
- (d) PM and PM10 emissions from baghouse RMDC3 and baghouse RMDC4 controlling Raw Mill #1 (EU11) and Raw Mill #2 (EU12) respectively shall each not exceed 4.51 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

Comment 21

Condition D.2.9(b) – The first phrase of Condition D.2.9(b) should be modified as follows: “Within 180 days after startup of the preheater Kilns #1 and #2.” Additionally, consistent with the above-referenced comments to Condition D.2.1, delete the reference to EU11A and EU12A.

Response 21

Since the reference to EU11A and EU12A was not deleted in condition D.2.1, it will not be deleted in condition D.2.9 as requested in this comment. To reflect the correct testing requirement, condition D.2.(b) is changed as follows:

D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (b) Within **60 days after achieving maximum capacity but no later than 180 days after issuance of this Part 70 permit startup of preheater Kilns #1 and #2**, in order to demonstrate compliance with Condition D.2.1 and D.2.7, the Permittee shall perform PM and **PM10** testing on the Raw Mills (EU11, EU11A, EU12 and EU12A) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit. **PM10 includes filterable and condensible PM10.**

Comment 22

Condition D.2.10 – Since Lehigh has agreed to take the coal-fired stoker (the only coal combusting emission unit in Section D.2 of the permit) out of operation, delete Condition D.2.10 regarding Sulfur Dioxide Emissions and Sulfur Content and relabel the following conditions accordingly.

Response 22

To reflect discontinuing the coal usage and the removal of the coal stoker, condition D.2.10 was deleted.

~~D.2.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-2]~~

~~Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:~~

~~(a) Coal sampling and analysis shall be performed using one of the following procedures:~~

~~(1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:~~

~~(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;~~

~~(B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;~~

~~(C) Minimum sample size shall be five hundred (500) grams;~~

~~(D) Samples shall be composited and analyzed at the end of each calendar month;~~

~~(E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or~~

~~(2) Sample and analyze the coal pursuant to 236 IAC 3-7-3.~~

~~(b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]~~

~~A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.~~

~~(c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]~~

The table of contents and the remaining conditions were renumbered accordingly. Also, references to these conditions were changed to reflect the deletion of the old D.2.10 condition.

Comment 23

Conditions D.2.12; D.3.10; D.4.12; and D.5.10 – The National Emission Standards for Hazardous Air Pollutants (“NESHAP”) monitoring requirements set forth in Conditions D.2.12; D.3.10; D.4.12 and D.5.10 should be moved to the applicable Compliance Monitoring Requirements Section of the permit. As currently situated, these NESHAP monitoring conditions are contained in the applicable Compliance Determination Sections of the permit. However, separate NESHAP requirements set forth the performance test/compliance determination requirements for the facilities/emission units included in these conditions and are in fact already included in the permit and are grouped in the applicable Compliance Determination Sections of the permit. Therefore, please move Conditions D.2.12; D.3.10; D.4.12; and D.5.10 to the applicable Compliance Monitoring Sections of Sections D.2, D.3, D.4 and D.5 of the permit.

Response 23

Conditions D.2.12 (now D.2.11); D.3.10; D.4.12 and D.5.10 were moved to the Compliance Monitoring Requirements Section of the Permit. The Table of Contents was modified to reflect this change.

Comment 24

Conditions D.2.12(b) and D.3.10(b)(misabeled D.3.10(e)) – Consistent with 40 CFR § 63.1350(e), delete the second sentences of Conditions D.2.12(b) and D.3.10(b)(misabeled D.3.10(e)) and replace them with the following: “The Method 22 test shall be conducted while the affected source is operating at

Response 24

To reflect the correct requirements of 40 CFR 63.1350(e) and to correct a typographical error, condition D.2.12(b) (now D.2.11(b)) and D.3.10(b) are changed as follows:

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at **representative performance conditions** ~~the highest load or capacity level reasonably expected to occur within the day~~. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during

the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- ~~(e)~~ **(b)** Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating **at representative performance conditions** ~~the highest load or capacity level reasonably expected to occur within the day~~. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment 25

Conditions D.2.12(b) and D.3.10(b)(misabeled D.3.10(e)) – The second paragraphs of Conditions D.2.12(b) and D.3.10(b)(misabeled D.3.10(e)) are confusing as written. Consistent with 40 CFR § 63.1350(e), replace the second paragraphs of Conditions D.2.12(b) and D.3.10(b)(misabeled D.3.10(e)) as follows:

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Response 25

To clarify any possible confusion, conditions D.2.11(b) and D.3.10(b) are changed as follows:

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (b)** Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected

source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

~~If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

~~If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment 26

Condition D.2.17(a) – Consistent with the above-referenced comments regarding the deletion of references to the coal-fired stoker, delete Condition D.2.17(a) regarding the record keeping requirements associated with the to be deleted sulfur dioxide limits for the coal-fired stoker. Relabel the following conditions and the cross-references thereto accordingly.

Response 26

To reflect discontinuing the coal usage and the removal of the coal stoker, and to reflect revision #18 by IDEM, condition D.2.17 (now D.2.16) is changed as follows:

D.2.16 Record Keeping Requirements

~~(a) To document compliance with Conditions D.2.4(a) and D.2.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.2.4(a).~~

~~(1) Calendar dates covered in the compliance determination period;~~

~~(2) Actual monthly coal usage since last compliance determination period;~~

~~(3) Calendar month average sulfur content and heat content;~~

~~(4) Calendar month average sulfur dioxide emission rates.~~

~~326 IAC 7-1.1, 7-2 and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.~~

~~(b)(a)~~ To document compliance with Condition D.2.12, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts **controlling the raw mills (EU11, EU11A, EU12 and EU12A)** once per shift day **and all other baghouse stack exhausts once per shift.**

~~(e)(b)~~ To document compliance with Condition D.2.13, the Permittee shall maintain records of the ~~inlet and outlet~~ differential static pressure of each baghouse **controlling the raw mills (EU11, EU11A, EU12 and EU12A)** once per shift day **and all other baghouses once per shift.**

Following conditions were renumbered to reflect the deletion of this condition.

Comment 27

Condition D.2.18(c) - Consistent with the above-referenced comments regarding the deletion of references to the coal-fired stoker, delete Condition D.2.18(c) regarding the reporting requirements associated with the to be deleted sulfur dioxide limits for the coal-fired stoker. Relabel the following conditions and the cross-references thereto accordingly.

Response 27

Response 28

To reflect the correct unit description, Condition D.3.1(q) is changed as follows:

D.3.1 Particulate [326 IAC 6-3-2]

- (q) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the north silo **operation** (EU39A) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.

Comment 29

Condition D.3.1(r) – Condition D.3.1(r) should reference the “south silo operation” rather than the “south silo.” Additionally, please insert a space between “exceed” and “46.3 pounds” in Condition D.3.1(r).

Response 29

To reflect the correct unit description and correct a typographical error, Condition D.3.1(r) is changed as follows:

D.3.1 Particulate [326 IAC 6-3-2]

- (r) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the south silo **operation** (EU39B) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.

Comment 30

Condition D.3.5(b) – Condition D.3.5(b) contains a typographical error. Condition D.3.5(b) should reference the “National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, Subparts A and LLL” rather than the “New Source Performance Standards (NSPS), 40 CFR 63, Subparts A and LLL (Standards of Performance for Portland Cement Plants).”

Response 30

To correct a typographical error, condition D.3.5(b) is changed as follows:

D.3.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (b) The clinker handling facilities/emission units (EU26c, EU28, and EU30) are not subject to the requirements of the **National Emission Standards for Hazardous Air Pollutants**

~~(NESHAP) New Source Performance Standards (NSPS), 40 CFR 63, Subparts A and LLL (NESHAP from the Portland Cement Manufacturing Industry) (Standards of Performance for Portland Cement Plants)~~ because they are not affected facilities under the regulation.

Comment 31

Condition D.3.6(a) – Condition D.3.6(a) should clarify that the PSD non-applicability limits are pursuant to particular modifications. Therefore, please restate Condition D.3.6(a) as follows:

- (a) In order to render the requirements of PSD not applicable, to the permittee's: 1979 pan clinker conveyor modification; 1984 packing machine modification; 1987 roll crusher modification; 1989 finish mill #4 separator modification; and 1993 lime bin modification, respectively, the following conditions shall apply:
- (1) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.
 - (2) The PM emissions from the baghouses SDC11 and SDC12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.
 - (3) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.
 - (4) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.
 - (5) The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.
 - (6) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.
 - (7) The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.

Response 31

To clarify that the PSD non-applicability limits are pursuant to particular modifications, condition D.3.6 is changed as follows:

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) In order to render the requirements of PSD not applicable, **to the Permittee's: 1979 pan clinker conveyor modification; 1984 packing machine modification; 1987 roll crusher modification; 1989 finish mill #4 separator modification; and 1993 lime bin modification, respectively**, the following conditions shall apply:

Comment 32

Condition D.3.6(b) - Condition D.3.6(b) should clarify that the PSD non-applicability limits are pursuant to the preheater modification. Therefore, please restate the first sentence of Condition D.3.6(b) as follows: "Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of the preheater Kilns #1 and #2."

Response 32

To clarify that the PSD non-applicability limits are pursuant to the preheater modification, the first and last sentences of condition D.3.6(b) are changed as follows:

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (b) **Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the Kiln #1 and Kiln #2 modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:**

Therefore, the requirements of 326 IAC 2-2 (PSD) and ~~40 CFR 52.24~~ are not applicable to the preheater modification.

Comment 33

Condition D.3.6(b)(18) – Condition D.3.6(b)(18) should reference the “North Silo Operation” rather than the “North Silo” and the “South Silo Operation” rather than the “South Silo.”

Response 33

To reflect the correct unit description, Condition D.3.6(b)(18) is changed as follows:

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (b) Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the Kiln #1 and Kiln #2 modification, the following conditions shall apply:
- (18) PM and PM10 emissions from baghouse SDC1 and baghouse SDC2 controlling North Silo **Operation** (EU39A) and South Silo **Operation** (EU39B) respectively shall each not exceed 1.77 pounds per hour .

Comment 34

Condition D.3.8(b) - The first phrase of Condition D.3.8(b) should be modified as follows: “Within 180 days after startup of the preheater Kilns #1 and #2.”

Response 34

To reflect the correct testing requirement and clarify the testing requirements, condition D.3.8(b) is changed as follows:

D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]

- (b) Within 60 days after achieving maximum capacity but no later than 180 days after ~~issuance of this Part 70 permit~~ **startup of preheater Kilns #1 and #2**, in order to demonstrate compliance with Condition ~~D.3.1(d), (e), (f), (g)~~ **D.3.1(k), (l), (m), (n), (o)** and D.3.6, the Permittee shall perform PM and PM10 testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), and Finish Mill #4 (EU35). ~~Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.1, D.3.6 (a)(4) and (a)(5), the Permittee shall conduct PM and PM10 testing on and~~ the finish mill #4 separator (EU36). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM10 includes filterable and condensible PM10. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

Comment 35

Condition D.3.10 – Please correct the typographical errors in the subsection letters and numbers

contained in the second, third, eighth and tenth paragraphs of Condition D.3.10.

Response 35

To correct a typographical error, condition D.3.10 is changed as follows:

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

-
- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
- ~~(4)~~(1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.3.4; and
- ~~(5)~~(2) Procedures to be used to periodically monitor the affected facilities, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
- (B) The Permittee shall conduct a monthly 1-minute visible emissions test on each stack exhaust (S-RMDC5 through S-RMDC8, S-KDC1, S-KDC3, S-KDC5, S-FDC1 through S-FDC3, S-FDC5, S-FDC7, S-FDC13, and S-SDC1 through S-SDC12) associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish material storage facilities/emission units (EU37, EU39A, EU39B, EU40A, and EU40B), the bulk loading and packaging facilities/emission units (EU41 through EU47), the lime bin (EU38), and the truck loadout station (F06) in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the source is in operation.
- (C) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (D) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

- (E) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

~~(2)~~(3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- ~~(e)~~ (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at representative performance conditions. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

Comment 36

Condition D.4.1 - Condition D.4.1 should clarify that the PSD non-applicability limits are pursuant to the preheater modification. Therefore, please restate the first sentence of Condition D.4.1 as follows: "Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply upon startup of the preheater Kilns #1 and #2."

Response 36

To clarify that the PSD non-applicability limits are pursuant to the preheater modification and a sulfuric acid mist limit, condition D.4.1 is changed as follows:

D.4.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirement of 326 IAC 2-2 (PSD) not applicable to the preheater modification, the following conditions shall apply upon startup of either preheater Kilns #1 or #2:

- (a) The Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16) shall be limited to 321,875 tons each per 12 consecutive month period with compliance determined at the end of each month.
- (b) PM emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.28 lb/ton clinker.
- (c) PM10 emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.59 lb/ton clinker.
- (d) NOx emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 11.14 lb/ton clinker.
- (e) CO emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.67 lb/ton clinker.
- (f) SO2 emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 7.51 lb/ton clinker.

- (g) VOC emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.30 lb/ton clinker.
- (h) Lead emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.69E-03 lb/ton clinker.
- (i) **Sulfuric Acid mist emissions from each Kiln #1 (EU15) and Kiln #2(EU16) shall not exceed 3.9E-02 lb/ton clinker.**
- (j) **H2S emissions from each Kiln #1 (EU15) and Kiln #2(EU16) shall not exceed 0.037 lb/ton clinker.**

Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

Comment 37

Condition D.4.4(d) – Condition D.4.4(d) should cite Condition D.4.7 rather than Condition D.4.6. Additionally, consistent with 40 CFR § 63.1350(f), Condition D.4.12(d), and the TSD, please modify Condition D.4.4(d) as follows: “The kiln shall be operated such that the three hour rolling average temperature of the gas at the inlet to the kiln’s particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.4.7.”

Response 37

To reflect the correct rule requirements and to correct typographical errors, condition D.4.4(d) is changed as follows:

D.4.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

- (d) The kiln shall be operated such that the **three hour rolling average** temperature of the gas at the inlet to the kiln’s particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition ~~D.4.6~~ **D.4.7**.

Comment 38

Condition D.4.5 – Consistent with Lehigh’s CAM Plan submitted to the IDEM, the last phrase of the second sentence of Condition D.4.5 should reference D.4.1 and D.4.2.

Response 38

To clarify the requirements and to add the reference to the limits established in condition D.4.1, Condition D.4.5 was changed as follows:

D.4.5 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

~~It~~ **IDEM** has ~~been~~ determined that a Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the one-stage preheater kiln #1 (EU15), and the one-stage preheater kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions **D.4.1 and D.4.2**. A CAM plan was received from the source on December 19, 2002. IDEM ~~is~~ has ~~been~~ determined that compliance with the monitoring requirements of 40 CFR 63.8(c), Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64.

Comment 39

Condition D.4.7 – Consistent with the NESHAP for the Portland Cement Manufacturing Industry, 40 CFR § 63.1349(c), the second sentence of Condition D.4.7 should only require repeat PM performance testing from the kiln stack exhausts every five (5) years and dioxin/furans performance testing every two and one-half (2.5) years. Additionally, consistent with 40 CFR § 63.1349(e), the third sentence of Condition D.4.7 should be amended to include the phrase “that may adversely affect compliance with the applicable

Response 39

After contacting EPA’s Office of Enforcement and Compliance Assurance, it was explained to IDEM that the 40 CFR 63.7 requires that the stack testing should be performed under representative performance conditions. Therefore, it is necessary to add the requirement of repeating the performance testing for Dioxin/Furan to condition D.4.7. To reflect the correct rule requirements, condition D.4.7 is changed as follows:

D.4.7 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM **shall be repeated at least once every five 5 years and the test for dioxin/furans shall be repeated at least once every 2.5 years** from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test **that may adversely affect compliance with the applicable particulate matter or dioxins/furans limits**. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.
- (b) **Pursuant to 40 CFR 63.7, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of startup of preheater Kilns #1 and #2**

Comment 40

Condition D.4.8 – Condition D.4.8 includes the requirement to repeat the particulate matter (“PM”) performance testing on Kilns #1 and #2 every 2.5 years. Additionally, as currently written, Condition D.4.7 requires the repeat of PM performance testing for all three kilns every 2.5 years from the valid compliance demonstration conducted in accordance with Condition D.4.7. Please modify Condition D.4.7 as set forth above, but in any event, clarify in Condition D.4.8 that Lehigh will only be required to repeat the PM performance testing for Kilns #1 and #2 every 2.5 years from its startup of the preheater Kilns #1 and #2 by modifying the last sentence of Condition D.4.8 as follows: “As set forth in Condition D.4.7, the PM performance tests for Kilns #1 and #2 shall be repeated every 2.5 years from this valid compliance demonstration following startup of the preheater Kilns #1 and #2. The PM₁₀, NO_x, CO, SO₂, VOC and Lead testing for Kilns #1 and #2 shall also be repeated every 2.5 years from the Permittee’s initial compliance demonstration for each of these pollutants following start-up of the preheater Kilns #1 and #2.”

Additionally, please verify in the TSD that Lehigh need not repeat the performance tests for dioxin furan within ninety (90) days following startup of the preheater Kilns #1 and #2.

Response 40

To add the Sulfuric Acid mist testing, to reflect the change made in the response to comment 39 and to clarify the testing requirements, conditions D.4.8 are changed as follows:

D.4.8 Testing requirement [326 IAC 2-1.1-11]

To verify compliance with condition D.4.1, the permittee shall, within **60 days after achieving maximum capacity but no later than 180 days after startup of preheater Kilns #1 and #2**, perform PM, PM10, NOx, CO, SO2, VOC, Sulfuric Acid mist, **H2S**, and Lead testing on Kiln #1 (EU15) and Kiln #2 (EU16). ~~These tests shall be repeated every 2.5 years~~ **The PM, PM10, NOx, CO, SO2, VOC, Sulfuric Acid mist, H2S and Lead testing for Kilns #1 and #2 shall be repeated every 2.5 years from the Permittee's initial compliance demonstration for each of these pollutants following start-up of the preheater Kilns #1 and #2.**

Comment 41

Condition D.4.10(a)(3) – Condition D.4.10(a)(3) incorrectly references “236 IAC 3-7-3” and should instead reference “326 IAC 3-7-3.”

Response 41

To correct a typographical error, condition D.4.10(a)(3) is changed as follows:

D.4.10 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
 - (3) Sample and analyze the coal pursuant to ~~236~~ **326 IAC 3-7-3**.

Comment 42

Condition D.4.10(b) – Condition D.4.10(b) incorrectly references “the boiler” and should instead

Response 42

To correct a typographical error, condition D.4.10(b) is changed as follows:

D.4.10 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

- (b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the ~~boiler~~ **kilns** in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

Comment 43

Condition D.4.12 – The last sentence of Condition D.4.12 incorrectly includes a reference to Kiln #3 (EU17). As written, said condition implies that Kiln #3 is currently required to comply with the Compliance Assurance Monitoring Plan in accordance with 40 CFR Part 64. Since Lehigh's application for permit modification did not include modifications to Kiln #3, please delete the reference to Kiln #3 (EU17) from this sentence.

Response 43

To remove the reference to Kiln #3 and for additional clarification, the last sentence in condition D.4.12 is changed as follows:

D.4.12 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL][40 CFR 64.2**]**

Recording the temperature of the exhaust gases from kiln #1 (EU15), **and** kiln #2 (EU16), ~~and kiln #3 (EU17)~~ shall satisfy the requirement of the Compliance Assurance Monitoring (CAM) Plan **for SO2 emissions monitoring**, in accordance with the requirements of 40 CFR 64.

Comment 44

Condition D.4.14(b)(3) – Please correct the spacing in Condition D.4.14(b)(3) consistent with the other subconditions of this condition.

Response 44

This condition was changed as shown in revision #15 by IDEM. No change is made to this condition due to this comment.

Comment 45

Conditions D.4.17(b) and D.5.16(b) – The references to “40 CFR 63.1354(8)” in Conditions D.4.17(b) and D.5.16(b) are incorrect because 40 CFR § 63.1354(8) applies to continuous emission monitors (“CEMs”) not to continuous opacity monitors (“COMs”). Therefore, these conditions should be modified as follows: “The Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR Part 63, Subpart A.”

Response 45

D.4.17 Reporting Requirements

- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with ~~40 CFR 63.1354(8)~~ and 40 CFR 63, Subpart A.

D.5.16 Reporting Requirements

- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with ~~40 CFR 63.1354(8)~~ and 40 CFR 63, Subpart A.

Comment 46

Condition D.4.17(c)(2) – Condition D.4.17(c)(2) incorrectly references “40 CFR 63.1350(f)(7).” 40 CFR § 63.1350(f)(7) does not exist. Please replace said citation with the correct citation, “40 CFR § 63.1350(f)(6).” Consistent with the requirements of 40 CFR § 63.1350(f)(6), please rephrase condition D.4.17(c)(2) as follows: “All failures to verify the calibration of the thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(6).”

Response 46

To reflect the correct rule requirements and reference the correct citation, condition D.4.17(c)(2) is changed as follows:

D.4.17 Reporting Requirements

- (c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:
- (2) All failures to ~~verify the calibration~~ **calibrate** **calibration of the** thermocouples and other

temperature sensors as required under 40 CFR 63.1350(f)(7 6).

Comment 47

Condition D.5.1 - Condition D.5.1 should clarify that the PSD non-applicability limits are pursuant to the preheater modification. Therefore, please restate Condition D.5.1 as follows: "Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, upon startup of the preheater Kilns #1 and #2, PM and PM10 emissions from baghouse KDC2 and baghouse KDC4 controlling Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU20) respectively shall each not exceed 11.41 pounds per hour."

Response 47

To clarify that the PSD non-applicability limits are pursuant to the preheater modification, condition D.5.1 is changed as follows:

D.5.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to Significant Permit Modification 093-16851-00002 issued in 2003, in order to render the requirement of 326 IAC 2-2 (PSD) not applicable to the Kiln preheater modification, upon startup of the preheater Kilns #1 and #2, PM and PM10 emissions from baghouse KDC2 and baghouse KDC4 controlling Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU20) respectively shall each not exceed 11.41 pounds per hour. Therefore the requirements of 326 IAC 2-2 (PSD) are not applicable to the preheater modification.

Comment 48

Condition D.5.3 - The title of Condition D.5.3 (specifically the lack of underlining of same) should conform with the formatting of the other permit condition titles.

Response 48

The formatting of the title of condition D.5.3 was corrected.

Comment 49

Condition D.5.6 – Consistent with 40 CFR § 63.1349 (the authority cited by the IDEM for this condition), Condition D.5.6 should only require repeat performance tests for PM, and should only require same once every five years. The NESHAP for the Portland Cement Manufacturing Industry only requires repeat PM performance tests for the clinker coolers once every five years and does not require repeat performance tests for opacity.

Response 49

To reflect the correct rule requirements, condition D.5.6 is changed as follows:

D.5.6 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM and opacity limits established in Condition D.5.4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. ~~These~~ **PM** tests shall be repeated at least once every ~~2-5~~ **5** years from the date of this valid compliance demonstration.

Comment 50

Condition D.5.7 – Condition D.5.7 of Lehigh's existing Part 70 Permit has been modified to include testing requirements for PM₁₀, testing requirements to demonstrate compliance with new Condition D.5.1, and repeat testing requirements; however, as written Condition D.5.7 requires PM₁₀ testing and testing to

demonstrate compliance with D.5.1 (a new modification condition) to be conducted within one hundred and eighty (180) days of issuance of the modified Part 70 Permit, rather than one hundred and eighty days from startup of the preheater Kilns #1 and #2. Please amend Condition D.5.7 so as to separately address the repeat performance testing requirements for Clinker Cooler #3 and the repeat performance testing requirements for Clinker Coolers #1 and #2 (affected by the preheater modification). The performance testing requirements for Clinker Coolers #1 and #2 should specify that the testing is required within one hundred and eighty (180) days following startup of the preheater Kilns #1 and #2. Moreover, consistent with the NESHAP for the Portland Cement Manufacturing Industry, Condition D.5.7 should only require repeat PM performance tests for Clinker Cooler #3 every five years and should not require any repeat performance testing for opacity for any of the clinker coolers.

Response 50

The Cyclical Testing is to show compliance with limits established in condition D.5.1 only. The NESHAP testing requirements are established in condition D.5.6. Therefore, to clarify the testing requirements, condition D.5.7 is changed as follows:

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within 180 days after issuance of this Part 70 permit, the Permittee shall demonstrate compliance with the PM, PM10 and opacity limits established in Condition D.5.1 and Condition D.5.4~~ **PM and PM10 limits established in condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2**, by conducting performance tests for PM and **PM10** from all three clinker coolers, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. ~~These~~ **The PM and PM10 tests for all three Clinker Coolers** shall be conducted every 2.5 years. **PM 10 includes filterable and condensible PM10.**

Comment 51

Condition D.5.15(c) – The last phrase of Condition D.5.15(c) incorrectly cites to “D.5.13.” Please replace the reference to “D.5.13” with “D.5.12.”

Response 51

To correct a typographical error, condition D.5.15(c) is changed as follows:

D.5.15 Record Keeping Requirements

- (c) To document compliance with Condition D.5.12, the Permittee shall maintain records of the results of the inspections required under Condition D.5.12.

Comment 52

Condition D.6.3 – It appears as if subsections (b) and (c) of Condition D.6.3 (page 83 of the draft permit) were inadvertently deleted. Please restore Condition D.6.3 and any other conditions not cited as affected conditions on the cover page of this Draft Significant Permit Modification, consistent with Lehigh's existing initial Part 70 Operating Permit.

Response 52

Condition D.6.3(b) and condition D.6.3(c) were not affected conditions and were not deleted from the permit. These conditions were part of the public noticed draft permit. Therefore, there are no changes made to the draft permit due to this comment.

Comment 53

Source Summaries A.3(1)(b) and (c) and Section D.7 – Source Summaries A.3(1)(b) and (c) and Section D.7 of the permit are in error and are inconsistent with the applicable rules. Condition D.7.1 of the permit includes particulate emission limits for portable welding and refractory maintenance. In the definition of “insignificant activity” found at 326 IAC 2-7-1(21)(G)(vi)(EE), welding equipment related to

production activities is listed. However, under the definition of “trivial activities” found at 326 IAC 2-7-1(40), brazing, soldering and welding activities are included in the definition of “trivial activities” when *routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the sources,* and “*where those activities would not be associated with any commercial production process.*” See 326 IAC 2-7-1(40)(E)(iii). Lehigh’s portable welding equipment is associated with maintenance activities and not production processes, and therefore should be classified as a “trivial activity” and not as an “insignificant activity.” Because 326 IAC 6-3-1(b)(13) clearly exempts activities classified as “trivial activities” from the particulate emissions limits in 326 IAC 6-3, the portable welding equipment should be removed from the specifically regulated insignificant activities list in Source Summary A.3(1)(b) and from Section D.7.

Additionally, “Refractory work,” referenced in Section D.7 and Source Summary A.3(1)(c) of the permit should also be classified a “trivial activity,” since it is a “*maintenance activity*” where “*air emissions from the activity would not be associated with any commercial production process.*” Although the definition of “insignificant activity” includes “*Refractory storage not requiring air pollution control equipment*” (see 326 IAC 2-7-1(21)(G)(iv)), the maintenance activity associated with refractory work is clearly different from the “refractory storage” included in the definition of “insignificant activity.” Moreover, even if the refractory work were considered an “insignificant activity” it would not be subject to 326 IAC 6-3, since the refractory maintenance work would not be considered a “process operation.” The particulate emission limitations for manufacturing processes apply to production operations associated with the commercial production process and not to maintenance activities that are not “process operations.” As such, refractory work should also be eliminated from Source Summary A.3(1)(c) and Section D.7 of the permit.

Moreover, since refractory work and portable welding are both trivial activities and/or in any event not subject to 326 IAC 6-3, the entire Section D.7 should be eliminated from the permit.

In any event, portions of the equation in Condition D.7.1 and portions of the citation in D.7.2(b) were inadvertently deleted. If not deleted, please restore Conditions D.7.1 and D.7.2(b) and any other conditions not cited as affected conditions on the cover page of this Draft Significant Permit Modification, consistent with Lehigh’s existing Initial Part 70 Operating Permit.

Response 53

To remove references to the refractory work and the portable welding, Source Summaries A.3(1)(b) and (c) and Section D.7 are deleted as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
 [326 IAC 2-7-5(15)]

-
- (1) This stationary source includes the following specifically regulated insignificant activities:
- (a) — Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) — ~~Portable welding. [326 IAC 6-3-2]~~
- (c) — ~~refractory work. [326 IAC 6-3-2]~~

~~SECTION D.7 — FACILITY/EMISSION UNIT OPERATION CONDITIONS~~

~~Facility Description [326 IAC 2-7-5(15)]~~

~~Insignificant PM emitting facilities/emission units including the following:~~

- ~~(1) — Portable welding, and~~

Response 55

The actual emissions were calculated by using the average of the production levels for the years 1999 and 2000. Therefore, to clarify the last sentence under the heading “Increased Utilization of Existing Process” should be (The past actual emissions were calculated from the average **of the** annual production levels of the years 1999 and 2000.

Comment 56

TSD, History, p. 2 – The History section of the TSD should be modified to include all of Lehigh’s application submittals, including the responses to the IDEM’s Requests for Additional Information. As such, please include the following after the first sentence: “Additional information was received on October 25, 2002, November 26, 2002, November 27, 2002, December 19, 2002, and December 30, 2002. Other additional information has also been provided through verbal communication and through emails.”

Response 56

For further clarification, the history section of the TSD should have stated the following:

History

On June 28, 2002, Lehigh Cement Company submitted an application to the OAQ requesting to convert Kilns #1 and #2 from long dry kilns to one-stage preheater kilns. **Additional information was received on October 30, 2002, November 26, 2002, November 27, 2002, December 19, 2002, April 04, 2003 and through verbal communication and electronic mail.**

Comment 57

TSD, Stack Summary, p. 2 – The Stack S-KP2 is the stack for Kiln #3. Please delete Stack S-KP2 from the table as Kiln #3 is not part of the preheater modification.

Response 57

The Stack Summary in the TSD should have been as follows:

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-KP1	kiln #1 and kiln #2	200	18	156,000	300
S-KP2	kiln #3	100	5.5	N/A	300

Comment 58

TSD, Federal Rule Applicability, (a), (b) and (c), p. 5 – These sections incorrectly reference the terms “effected facilities” and “effective units.” Please amend these sections to reference “affected facilities.”

Response 58

To correct typographical errors, the Federal Rule Applicability section in the TSD should have stated the following:

Federal Rule Applicability

- (a) Kilns #1 and #2 at Lehigh Portland Cement Company are ~~effected~~ **affected** facilities as defined in the New Source Performance Standard for Portland Cement Plants 326 IAC 12 and 40 CFR 60.60, Subpart F but exempt from the requirements of this rule pursuant to 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry) which is applicable to these units.
- (b) Kilns #1 and #2 at Lehigh Portland Cement Company are not ~~effected units~~ **affected facilities** as defined in the New Source Performance Standard for Nonmetallic Mineral

Mineral Processing Plants 40 CFR 60.670, Subpart OOO. Therefore, 40 CFR 60.670, Subpart OOO does not apply to Kilns #1 and #2.

- (c) Kilns #1 and #2 at Lehigh Portland Cement Company are not ~~affected units~~ **affected facilities** as defined in the New Source Performance Standard for Coal Preparation Plants 40 CFR 60.250, Subpart Y. Therefore, 40 CFR 60.250, Subpart Y does not apply to Kilns #1 and #2.

Comment 59

TSD, Federal Rule Applicability, (e), p. 5 – This section should be amended to include that Lehigh is also subject to 40 CFR Part 63, Subpart A.

Response 59

The Federal Rule Applicability section in the TSD should have stated the following:

Federal Rule Applicability

- (e) Kilns #1 and #2 at Lehigh Portland Cement Company are subject to the requirements of 40 CFR 63, Subparts **A and LLL** (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry). There are no new National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

Comment 60

TSD, State Rule Applicability, Entire Source, p. 6 – The table included in the State Rule Applicability – Entire Source section of the TSD incorrectly states that the Hot Spout Clinker Ladder (EU28) with BH is subject to an hours limitation of 1,500 hours of operation. Please replace the 1,500 hours/year listed in the table with 8,760 hours/year.

Response 60

The operating time of the Hot Spout Clinker Ladder (EU28) should have been 8760 hrs/yr in the State Rule applicability section in the TSD.

Comment 61

TSD, State Rule Applicability – Individual Facilities, p. 9 – In subsection (b) under the heading “326 IAC 10-3-5 (Recordkeeping and reporting),” please replace “he” with “The.”

Response 61

To correct a typographical error, The State Rule Applicability - Individual Facilities section should have been as follows:

326 IAC 10-3-5 (Record Keeping and reporting)
Pursuant to 326 IAC 10-3-5

- (b) By May 31, 2004, Lehigh Cement Company shall submit to the department the following information:
- (1) The identification number and type of each unit subject to this rule.
 - (2) The name and address of the plant where the unit is located.

Comment 62

TSD, Changes to the Part 70 Permit, p. 10 – Delete subsection (v) in the middle of page 10 of the TSD consistent with the comments to Source Summary A.2(v).

Response 62

To reflect discontinuing the coal usage and the removal of the coal stoker, the changes to the Part 70 Permit section should have been as follows:

Changes to the Part 70 Permit

1. To reflect discontinuing the coal usage for the raw mill heater and to reflect the modification of the kilns Section A.2 was changed as follows:
 - A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]
-

The kiln facilities/emissions units, as follows:

- (v) ~~One (1) coal-fired stoker for backup heat supply for the raw mills, identified as EU11B and EU12B, constructed in 1977, with natural gas-fired burners installed in 1999, identified as EU11A and EU12A, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.~~

Comment 63

TSD, Changes to the Part 70 Permit, p. 12 – Several strikeouts were omitted in the section of the TSD regarding the changes made to Section D.2 of Lehigh's Part 70 Permit. Consistent with the draft permit, at the bottom of page 12 of the TSD under the subheading D.2.2, "EU11B" and "and EU12B" should be in strikeout font, to indicate that said language was deleted from Lehigh's initial Part 70 Permit.

Response 63

To reflect discontinuing the coal usage and the removal of the coal stoker, change 3 in the changes to the Part 70 Permit section should have been as follows:

2. Section D.2 was changed as follows:
- (A) To reflect discontinuing the coal usage for the raw mill heater the Facility/Emissions Unit Description, condition D.2.2, D.2.4, D.2.9 and D.2.12 were changed as follows:

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the material storage building (F03), and the raw mills (EU11, EU11A, ~~EU11B~~, EU12, and EU12A ~~and EU12B~~) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

Comment 64

TSD, Changes to the Part 70 Permit, p. 13 – Consistent with the draft permit and the comments above, the following text on page 13 of the TSD should be shown in strikeout font to indicate that said language was deleted from Lehigh's initial Part 70 Permit: (1) the first paragraph and all of subsection (a) and the subsection heading "(b)" under the subheading D.2.4; (2) "EU11A, and EU11B" and "EU12A, and EU12B" under the subheading D.2.9; (3) "EU11B and "and EU12B" under the subheadings D.2.12(a) and (b). Additionally, please add "D.2.7" after "D.2.1" in bold typeface in the first sentence under the heading D.2.9.

Response 64

References to the natural gas burners EU11A and EU11B will not be deleted as explained in the response to comment 17. To reflect discontinuing the coal usage and the removal of the coal stoker, change 3 in

the changes to the Part 70 Permit section should have been as follows:

(A)

D.2.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

~~The raw mills (EU11 and EU12) can be fired by either the coal-fired stoker (EU11B and EU12B) or the natural gas burners (EU11A and EU12A). The limit in (a) applies only when the using the coal-fired stoker (EU11B and EU12B).~~

~~(a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of coal in the coal-fired stoker shall not exceed six (6.0) pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.~~

~~(b) Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply to the natural gas-fired burners (EU11A and EU12A).~~

D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

~~(b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.2.1 and D.2.7, the Permittee shall perform PM testing on the Raw Mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.~~

D.2.12 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

~~(a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:~~

~~(b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:~~

Comment 65

TSD, Changes to the Part 70 Permit, p. 14 – The language contained in the first and second sentences of the first bold typeface paragraph on page 14 of the TSD should be amended consistent with the comments to Condition D.2.12(b) listed above.

Response 65

To be consistent with the above changes, change 3 in the changes to the Part 70 Permit section should have been as follows:

(B) In order to reflect the change in the rule, condition D.2.12(b) was changed as follows:

(b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

- ~~(6) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and~~
- ~~(2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

~~If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment 66

TSD, Changes to the Part 70 Permit, pp. 16, 17 – If the subsection headings have been modified, please show the previous subsection headings in strikeout font.

Response 66

Change 4 in the Changes to the Part 70 Permit section should have been as follows:

- (A) Lehigh Cement Company has appealed some of the conditions in the issued Part 70 Operating Permit. Upon further evaluation, OAQ agreed to revise Condition D.3.1 as follows:

D.3.1 Particulate [326 IAC 6-3-2]

- ~~(d)~~ (k) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #1 and associated feed bin (EU32) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- ~~(e)~~ (l) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #2 and associated feed bin (EU33) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- ~~(f)~~ (m) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #3 and associated feed bin (EU34) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- ~~(g)~~ (n) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #4, associated feed bin and separator (EU35 and EU36) shall not exceed 45 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 50 tons per hour.
- ~~(h)~~ (o) Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the lime bin (EU38) shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons per hour.

Comment 67

TSD, Changes to the Part 70 Permit, p. 17 – Consistent with the draft permit, please change “5.4” to “13.6” and “1.5” to “6” in subsection (o) at the top of page 17 of the TSD regarding the lime bin.

Response 67

Change 4 in the Changes to the Part 70 Permit section should have been as follows:

- (A) Lehigh Cement Company has appealed some of the conditions in the issued Part 70 Operating Permit. Upon further evaluation, OAQ agreed to revise Condition D.3.1 as follows:

D.3.1 Particulate [326 IAC 6-3-2]

- ~~(h)~~ (o) Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the lime bin (EU38) shall not exceed ~~5.4~~ **13.6** pounds per hour when operating at a process weight rate of ~~1.5~~ **6** tons per hour.

Comment 68

TSD, Changes to the Part 70 Permit, p. 17 – Subsection (q) on page 17 of the TSD should reference the “north silo operation” rather than the “north silo.”

Change 4 in the Changes to the Part 70 Permit section should have been as follows:

- (B) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.3.6(b).
- (c) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the Kiln #1 and Kiln #2 modification, the following conditions shall apply:
- (18) PM and PM10 emissions from baghouse SDC1 and baghouse SDC2 controlling North Silo **Operation** (EU39A) and South Silo **Operation** (EU39B) respectively shall each not exceed 1.77 pounds per hour.

Comment 72

TSD, Changes to the Part 70 Permit, p. 21 – The language contained in the first and second sentences of the first bold typeface paragraph on page 21 of the TSD should be amended consistent with the comments to Condition D.3.10(b) listed above.

Response 72

To be consistent with changes made due to previous comments, change 4 in the changes to the Part 70 Permit section should have been as follows:

- (D) In order to reflect the change in the rule, condition D.3.10 was changed as follows:

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (e) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

- (1) ~~Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and~~
- (2) ~~Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

~~If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR §§ 63.1350(a)(1) and (a)(2).

Within twenty-four (24) hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which visible emissions were observed during the follow-up Method 22 test in accordance with 40 CFR Part 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment 73

TSD, Changes to the Part 70 Permit, p. 23 – Consistent with the draft permit, the paragraph at the top of page 23 of the TSD should be labeled “D.4.7” rather than “D.4.6.” **Additionally**, the paragraph following said section heading should be modified consistent with the comments to D.4.7 listed above.

Response 73

To be consistent with changes made due to previous comments, Change 5 in the Changes to the Part 70 Permit section should have been as follows:

5. Section D.4 was changed as follows:

(C) In order to reflect the addition of the new D.4.1 condition the following changes were made:

D.4.5 6 7 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

-
- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.3 4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM **shall be repeated at least once every five 5 years and the test for dioxin/furans shall be repeated at least once every 2.5 years** from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test **that may adversely affect compliance with the applicable particulate matter or dioxins/furans limits**. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.
- (b) **Pursuant to 40 CFR 63.7, the Permittee is required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of startup of preheater Kilns #1 and #2**

Comment 74

TSD, Changes to the Part 70 Permit, p. 23 – Consistent with the draft permit, the second paragraph on page 23 of the TSD should be labeled “D.4.8” rather than “D.4.7.” **Additionally**, the paragraph following said section heading should be modified consistent with the comments to D.4.8 listed above.

Response 74

Change 5 in the Changes to the Part 70 Permit section should have been as follows:

5. Section D.4 was changed as follows:

(C) In order to reflect the addition of the new D.4.1 condition the following changes were made:

D.4.7 8 Testing requirement

To verify compliance with condition D.4.1, the permittee shall, within 180 days after startup, perform PM, PM₁₀, NO_x, CO, SO₂, VOC, and Lead testing on Kiln #1 (EU15) and Kiln #2 (EU16). ~~These tests shall be repeated every 2.5 years.~~ As set forth in Condition D.4.7, the PM performance tests for Kilns #1 and #2 shall be repeated every 5 years from this valid compliance demonstration following startup of the preheater Kilns #1 and #2. The PM₁₀, NO_x, CO, SO₂, VOC and Lead testing for Kilns #1 and #2 shall be repeated every 2.5 years from the Permittee's initial compliance demonstration for each of these pollutants following start-up of the preheater Kilns #1 and #2.

Comment 75

TSD, Changes to the Part 70 Permit, p. 23 – Consistent with the draft permit, the third paragraph on page 23 of the TSD should reference "D.4.17(f)" rather than "D.4.1.17(f)."

Response 75

Change 5 in the Changes to the Part 70 Permit section should have been as follows:

5. Section D.4 was changed as follows:

(D) In order to add the applicability and requirement of (CAM) 40 CFR 64, new conditions were added as D.4.5, D.4.16(e) and ~~D.4.1.17(f)~~ **D.4.17(f)**. Also, the table of contents was changed to show this addition and renumbering of conditions:

Comment 76

TSD, Changes to the Part 70 Permit, p. 24 –The first full sentence at the top of page 24 of the TSD should reference "D.4.17(f)" rather than "D.6.17(g)." Additionally, please relabel the paragraph following the heading "D.4.17" as subsection "(f)."

Response 76

Condition D.4.17(g) is correct as is and does not need to be re-labeled. To correct the typographical error, change 5 in the Changes to the Part 70 Permit section should have been as follows:

5. Section D.4 was changed as follows:

(E) To document compliance with the added D.4.1, new condition were added as D.4.16(f) and condition ~~D.6.17(g)~~ **D.4.17(g)**

Comment 77

TSD, Changes to the Part 70 Permit, p. 24 – Consistent with the draft permit, delete "and a new condition was added as condition D.5.16(f)" in subsection 6(B) on page 24 of the TSD. Additionally, consistent with said comment, delete the third paragraph of subsection 6(B) labeled D.5.16(f). Lastly, modify the second paragraph of subsection 6(B), labeled D.5.7, consistent with the comments to D.5.7 listed above.

Response 77

To be consistent with the draft permit, change 6 in the Changes to the Part 70 Permit section should have been as follows:

6. Section D.5 was changed as follows:

- (B) To document compliance with the added D.5.1, condition D.5.7 was changed ~~and a new condition was added as condition D.3.16 (f)~~ as follows:

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

~~Within 180 days after issuance of this Part 70 permit, t~~The Permittee shall demonstrate compliance with the PM, ~~PM10~~ and opacity limits established in ~~Condition D.5.1 and Condition D.5.4~~ **within 180 days after issuance of this Part 70 permit and with the PM and PM10 limits established in condition D.5.1 within 180 days from the startup of preheater Kilns #1 and #2**, by conducting performance tests for PM from all three clinker coolers, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. ~~These~~ **The PM and PM10 tests for Clinker Cooler #1 and Clinker Cooler #2 shall be conducted every 2.5 years and the PM tests for Clinker Cooler #3 shall be conducted every 5 years.**

D.5.16 Reporting Requirements

- ~~(f) A quarterly summary of the information to document compliance with Condition D.5.16 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

**Significant Source Modification
Comment 78**

The following should be added after the second sentence of the first paragraph of the Significant Source Modification letter: "Additional information was received on October 25, 2002, November 26, 2002, November 27, 2002, December 19, 2002, and December 30, 2002. Other additional information has also been provided through verbal communication and through emails."

Response 78

Even though this additional sentence was suppose to be included in the TSD and is acknowledge in this addendum, it is not required in the Source Modification Letter. Therefore, no change is made due to this comment.

Forms

Comment 79

Part 70 Quarterly Report for Use When Combusting Coal Form – Consistent with the comments above, please delete the reference to the Coal Stoker on this form.

Response 79

"The Part 70 Quarterly Report for Use When Combusting Coal" was changed by removing the reference to the Coal Stoker.

Comment 80

Emergency Occurrence Report Form – Please restore all the lines between the cells on page two of this form.

Response 80

All lines between cells were restored in emergency Occurrence Report Form.

Appendix

Comment 81

Eight pages of emission information was included after the TSD. If this information was intended to be an appendix to the TSD, please label it as such.

Response 81

The line "Appendix A" was added to the eight pages of emission calculations.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification and a Part 70 Significant Permit Modification.

Source Background and Description

Source Name:	Lehigh Cement Company
Source Location:	121 North First Street, Mitchell, IN 47446
County:	Lawrence
SIC Code:	3241
Operation Permit No.:	T 093-5990-00002
Operation Permit Issuance Date:	December 30, 2002
Significant Source Modification No.:	093-15822-00002
Significant Permit Modification No.:	093-16851-00002
Permit Reviewer:	Ghassan Shalabi

The Office of Air Quality (OAQ) has reviewed a modification application from Lehigh Cement Company relating to the modification of the following emission units and pollution control devices:

- (a) One (1) kiln #1, identified as EU15, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (b) One (1) kiln #2, identified as EU16, constructed in 1959 as a long dry kiln and to be modified to a one-stage preheater kiln in 2003, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

Lehigh proposes to convert Kilns #1 and #2 from long-dry process to one-stage preheater process. The conversion is a physical modification and a modification of the method of operation. The main difference between the two processes is the location of the kiln feed introduced to the system. The kiln feed is introduced into the rotary kiln directly when using the long-dry process, whereas, the kiln feed is introduced into riser duct to a cyclone in the one-stage preheater process. This conversion involves conversion of de-dusting cyclone into the preheater vessel in the gas stream exiting the kiln. Hot exhaust gasses from the kiln pass counter currently through the downward moving raw materials in the preheater vessel. This conversion will increase the heat transfer rate, improve the degree of heat efficiency, and reduce the process time.

Special Issue - Increased Utilization of Existing Processes

Lehigh Cement Company's conversion of the existing long-dry kilns #1 and #2 to one-stage preheater kilns will enable Lehigh to increase production from these kilns. IDEM has determined that this modification would result in an increased utilization of other existing units. An analysis of the increase in emissions from increased utilization of other units was performed, refer to appendix A. This analysis was done by calculating the past two year actual emissions and subtracting that from the projected future potential emissions.

Lehigh Cement Company has chosen to reduce plant wide emissions and accept short-term emission limits on most process units to render the requirements of PSD not applicable. The past actual emissions were calculated from the average annual production levels of the years 1999 and 2000.

History

On June 28, 2002, Lehigh Cement Company submitted an application to the OAQ requesting to convert Kilns #1 and #2 from long dry kilns to one-stage preheater kilns. Lehigh Cement Company submitted a Part 70 application on May 31, 1996. The Part 70 permit was issued on December 30, 2002.

Enforcement Issue

The source has the following enforcement actions pending:

- (a) The source has enforcement case number 12777 pending for alleged violations of 40 CFR 63, Subpart LLL (NESHAP Emissions Limitation).

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S-KP1	kiln #1 and kiln #2	200	18	156,000	300
S-KP2	kiln #3	100	5.5	N/A	300

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification and the Part 70 Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 28, 2002.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document (8 pages).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted,

stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	89.1
PM-10	189.9
SO ₂	2,417.4
VOC	97.9
CO	537.5
NO _x	3,587.1
Lead	0.545

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (f)(4). The potential to emit is greater than twenty-five (25) tons per year for PM, PM-10, SO₂, VOC, and NO_x. The potential to emit is greater than one hundred (100) tons per year for CO.

The Significant Source Modification will be incorporated into the Part 70 permit through a Significant Permit Modification because new emission limits conditions were added to the title V permit to render the requirements of 326 IAC 2-2 (PSD) not applicable.

County Attainment Status

The source is located in Lawrence County.

Pollutant	Status
PM-10	Attainment
SO ₂	Attainment
NO _x	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lawrence County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Lawrence County has been classified as attainment or unclassifiable for PM, PM₁₀, SO₂, NO_x, CO, and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	Greater than 250
PM-10	Greater than 250
SO ₂	Greater than 250
VOC	Less than 100
CO	Greater than 250
NO _x	Greater than 250

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.
- (b) These emissions are based upon Minor Source Modification Permit 093-11313-00002

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	Lead
Future Potential Emissions from Preheater Kilns 1 & 2	89.2	190.0	2417.4	97.9	537.5	3587.1	0.545
+ Potential Emissions Upstream and Downstream of Preheater Kilns	282.5	282.5	—	—	—	—	—
+ Potential Fugitive Emissions Upstream and Downstream Of Preheater Kilns	205.0	133.3	—	—	—	—	—
+ Potential Emissions from Raw Mill Natural Gas Furnace	^	^	0.0	0.5	6.9	8.2	0.000
- Past Actual Emissions From Long - Dry Kilns 1 & 2	80.3	195.0	2345.0	62.0	447.4	3545.0	0.005
- Past Actual Emissions Upstream and Downstream of Kilns	267.9	267.9	—	—	—	—	—

Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	Lead
- Past Actual Fugitive Emissions Upstream and Downstream of Kilns	205.8	129.3	—	—	—	—	—
- Past Actual Emissions from Raw Mill Coal Stoker*	^^	^^	36.5	0.0	1.8	8.1	
- Past Actual Emissions from Raw Mill Natural Gas Furnace	^^	^^	0.0	0.3	5.2	6.2	0.000
Projected Increase (stpy)	22.6	13.5	36.0	36.0	90.0	36.0	.540
PSD Threshold	25	15	40	40	100	40	0.6

^ Emissions for Raw Mill Heater are accounted for in the "potential emissions upstream and downstream of preheater kilns"

^^ Emissions for Raw Mill Heater are accounted for in the "Past actual upstream and downstream of kilns"

* Coal usage for the raw mill heater will be discontinued for drying in the raw mill, only natural gas will be used. Therefore, the potential emissions from the Raw Mill Coal Stoker are not included in the calculations.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- Kilns #1 and #2 at Lehigh Portland Cement Company are effected facilities as defined in the New Source Performance Standard for Portland Cement Plants 326 IAC 12 and 40 CFR 60.60, Subpart F but exempt from the requirements of this rule pursuant to 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry) which is applicable to these units.
- Kilns #1 and #2 at Lehigh Portland Cement Company are not effected units as defined in the New Source Performance Standard for Nonmetallic Mineral Processing Plants 40 CFR 60.670, Subpart OOO. Therefore, 40 CFR 60.670, Subpart OOO does not apply to Kilns #1 and #2.
- Kilns #1 and #2 at Lehigh Portland Cement Company are not effected units as defined in the New Source Performance Standard for Coal Preparation Plants 40 CFR 60.250, Subpart Y. Therefore, 40 CFR 60.250, Subpart Y does not apply to Kilns #1 and #2.
- There are no other new New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- Kilns #1 and #2 at Lehigh Portland Cement Company are subject to the requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry). There are no new National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.
- A Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64 is required for the one-stage preheater kiln #1 (EU15), and the one-stage preheater kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO₂ is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions D.4.2. A CAM plan was received from the source on December 19, 2002. It has been determined that

compliance with the monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64. Kilns #1 and #2 are equipped with a spray tower which aid in the reduction of SO₂ emissions and is also used to prevent the formation of dioxin and furan emissions from the kilns. The dioxin and furan emissions are regulated under Subpart LLL. As part of the Subpart LLL, Lehigh is required to continuously monitor the inlet electrostatic precipitator temperature on a rolling 180 minute block with a temperature limit established during the dioxin and furan compliance test. The above mentioned temperature monitoring should also satisfy CAM for SO₂.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification, the following conditions shall apply:

Emission source	Operating time (h/yr)	PM/PM10 limit (lb/hr)
Primary Crusher (EU01) with BH	2,500	0.90
Quarry Surge Bin (EU02) with BH	2,500	0.90
Sec. Crusher (EU03) & Tertiary Crusher (EU04) With BH	2,500	1.44
N. Screen House (EU05) with BH	2,500	0.18
S. Screen House (EU06) with BH	2,500	1.44
Belt 7/8 Conveyor transfer point (EU07) with BH	2,500	0.44
Belt 8/9 conveyor transfer point (EU08) with BH	2,500	0.44
Belt #6 (EU09) with BH	2,500	0.27
Shale Crusher (EU10) with BH	2,500	1.44
Raw Mill #1 (EU11) with BH	8,760	4.51
Raw Mil #2 (EU12) with BH	8,760	4.51
Blending Bins (EU 13) with BH (RMDC5)	8,760	1.06
Blending Bins (EU 13) with BH (RMDC6)	8,760	0.53
Kiln Supply Silos (EU14) with BH (RMDC7)	8,760	1.06
Kiln Supply Silos (EU14) with BH (RMDC8)	8,760	0.53
Kiln #1 Feed Bin (EU18) with BH	8,760	0.97
Kiln #2 Feed Bin (EU20) with BH	8,760	0.97
Clinker Cooler #1 (EU19) with BH	8,760	11.41
Clinker Cooler #2 (EU21) with BH	8,760	11.41
Cement Kiln Dust Bin (EU24) with BH	8,760	0.89
CKD Truck uploading System (EU24A) with BH	8,760	0.36
Mixer (EU24 B) with BH	8,760	0.54
S. Storage Drag (EU25) with BH	8,760	0.47
N. Clinker Tower (EU26A) with BH	1,500	1.76
S. Clinker Tower (EU27) with BH	8,760	1.68
Hot Spout Clinker Ladder (EU28) with BH	1,500	1.76
Pan Conveyor (EU29) with BH	8,760	1.70
E. Clinker Ladder (EU30) with BH	1,500	1.21

Emission source	Operating time (h/yr)	PM/PM10 limit (lb/hr)
Roll Crusher (EU31) with BH	8,760	1.84
Finish Mill #1 (EU32) with BH	8,760	1.42
Finish Mill #2 (EU33) with BH	8,760	1.42
Finish Mill #3 (EU34) with BH	8,760	1.42
Finish Mill #4 (EU35) with BH	8,760	0.64
Finish Mill #4 Separator (EU36) with BH	8,760	3.27
Lime Bin (EU38) with BH	2,500	0.22
Finish Mill Surge Bin (EU37) with BH	1,500	0.49
N. Silo (EU39A) with BH	8,760	1.77
S. Silo (EU39B) with BH	8,760	1.77
Silo Transfer - East (EU40A) with BH	8,760	0.57
Silo Transfer - West (EU40 B) with BH	8,760	0.57
E. Truck Loadout Bin (EU41)	8,760	0.43
W. Truck Loadout bin (EU43) with BH	8,760	0.43
E. Vacuolader (EU42) with BH	8,760	0.22
W. Vacuolader (EU44) with BH	8,760	0.22
Railroad Loadout Bin (EU45) with BH	2,000	0.71
Articulolader (EU46) with BH	2,000	0.21
Packing Machine (EU47)	5,500	1.84

Emission Source	Potential Clinker Production (tpy)	PM (lb/ton Clinker)	PM10 (lb/ton Clinker)	NOx (lb/ton Clinker)	CO (lb/ton Clinker)	SO2 (lb/ton Clinker)	VOC (lb/ton Clinker)	Lead (lb/ton Clinker)
Kiln #1	321,875	0.28	0.59	11.14	1.67	7.51	0.30	1.69E-03
Kiln #2	321.875	0.28	0.59	11.14	1.67	7.51	0.30	1.69E-03

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

Kilns #1 and #2 are exempt from the requirements of this rule because a more stringent Particulate Mater (PM) limit applies to these units pursuant to 326 IAC 20-27-1 which incorporates by reference 40 CFR 63, subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry).

326 IAC 7-1.1 (SO2 Emission Limitations) and 326 IAC 7-2-1 (SO2 Compliance Reporting)

As determined in the Part 70 permit, Kilns #1 and #2 are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) and 326 IAC 7-2-1 (Sulfur Dioxide Compliance Reporting). All applicable requirements pursuant to these rules are listed in the Part 70 permit.

326 IAC 8-1-6 (BACT)

The modified Kiln #1 and #2 are not subject to this rule. This rule applies to facilities constructed after January 1, 1980 which have the potential to emit 25 tons per year or more of VOC. The modified Kiln #1 and #2 have the potential to emit 97.9 tons of VOC per year but were constructed prior to January 1, 1980. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 10-3-3 (NOx Emission limitations)

Pursuant to 326 IAC 10-3-3, beginning on May 31, 2004, Kilns #1 and #2 shall not operate during the ozone control period of each year unless Lehigh Cement Company complies with one (1) of the following:

- (1) Operation of the kiln with one (1) of the following:
 - (A) Low-NO_x burners.
 - (B) Mid-kiln firing.
- (2) A limit on the amount of NO_x emitted when averaged over the ozone control period as follows:
 - (A) For long wet kilns, six (6) pounds of NO_x per ton of clinker produced.
 - (B) For long dry kilns, five and one-tenth (5.1) pounds of NO_x per ton of clinker produced.
 - (C) For preheater kilns, three and eight-tenths (3.8) pounds of NO_x per ton of clinker produced.
 - (D) For precalciner and combined preheater and precalciner kilns, two and eight-tenths (2.8) pounds of NO_x per ton of clinker produced.
- (3) Installation and use of alternative control techniques that may include kiln system modifications, such as conversions to semi-dry precalciner kiln processing, subject to department and U.S. EPA approval, that achieve a thirty percent (30%) emissions decrease from baseline ozone control period emissions. Baseline emissions shall be the average of the sum of ozone control period emissions for the two (2) highest emitting years from 1995 through 2000 determined in accordance with subsection (d)(1).

326 IAC 10-3-4 (NO_x monitoring and testing requirements)

Pursuant to 326 IAC 10-3-4, Beginning May 31, 2004, and each ozone control period thereafter Lehigh Cement Company shall comply with the following:

- (a) If complying with section 3(a)(1) of 326 IAC 10-3-3 shall operate and maintain the device according to a preventative maintenance plan prepared in accordance with 326 IAC 1-6-3.
- (b) If complying with section 3(a)(2) or 3(a)(3) of 326 IAC 10-3-3 shall monitor NO_x emissions during the ozone control period of each year using a NO_x CEMS in accordance with 40 CFR 60, Subpart A* and 40 CFR 60, Appendix B*, and comply with the quality assurance procedures specified in 40 CFR 60, Appendix F* and 326 IAC 3, as applicable.

326 IAC 10-3-5 (Record Keeping and reporting)

Pursuant to 326 IAC 10-3-5

- (a) Beginning May 31, 2004, and each ozone control period thereafter, Lehigh Cement Company shall comply with the following record keeping and reporting requirements:
 - (1) If complying with section 3(a)(1) of 326 IAC 10-3 shall create and maintain records that include, but are not limited to, the following:
 - (A) All routine and nonroutine maintenance, repair, or replacement performed on the device or devices.
 - (B) The date, time, and duration of any startup, shutdown, or malfunction in the operation of a kiln or the device or devices.

- (2) If complying with section 3(a)(2) or 3(a)(3) of 326 IAC 10-3 shall create and maintain records that include, but are not limited to, the following:
 - (A) Emissions, in pounds of NO_x per ton of clinker produced from each affected Portland cement kiln.
 - (B) Daily clinker production records.
 - (C) The date, time, and duration of any startup, shutdown, or malfunction in the operation of any of the Portland cement kilns, or the emissions monitoring equipment.
 - (D) The results of any performance testing.
 - (E) If a unit is equipped with a CEMS, identification of time periods:
 - (i) during which NO_x standards are exceeded, the reason for the exceedance, and action taken to correct the exceedance and to prevent similar future exceedances; and
 - (ii) for which operating conditions and pollutant data were not obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
 - (F) All records required to be produced or maintained shall be retained on site for a period of five (5) years. The records shall be made available to the department or the U.S. EPA upon request.
- (b) By May 31, 2004, Lehigh Cement Company shall submit to the department the following information:
 - (1) The identification number and type of each unit subject to this rule.
 - (2) The name and address of the plant where the unit is located.
 - (3) The name and telephone number of the person responsible for demonstrating compliance with this rule.
 - (4) Anticipated control measures, if any.
- (c) Lehigh Cement Company shall submit a report documenting that the total NO_x emissions and the average NO_x emission rate of the cement kilns for the ozone control period of each year to the department by October 31, beginning in 2004 and each year thereafter. For cement kilns complying with section 3(a)(1) of 326 IAC 10-3, estimated emissions and emission rate shall be determined in accordance with section 3(d) of 326 IAC 10-3 or from CEMS data, if a kiln is equipped with a CEMS as of the effective date of 326 IAC 10-3.
- (d) If complying with section 3(a)(1) of 326 IAC 10-3 Lehigh Cement Company shall include a certification with the report under subsection (c) that the control technology was installed, operated, and maintained in accordance with 326 IAC 10-3.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill

the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Changes to the Part 70 Permit

1. To reflect discontinuing the coal usage for the raw mill heater and to reflect the modification of the kilns Section A.2 was changed as follows:

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

The kiln facilities/emissions units, as follows:

- (v) One (1) ~~coal-fired~~ stoker for backup heat supply for the raw mills, ~~identified as EU11B and EU12B, constructed in 1977,~~ with natural gas-fired burners installed in 1999, identified as EU11A and EU12A, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.
- (ddd) One (1) kiln #1, identified as EU15, constructed in 1959 **as a long dry kiln and to be modified to a one-stage preheater kiln in 2003**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (eee) One (1) kiln #2, identified as EU16, constructed in 1959 **as a long dry kiln and to be modified to a one-stage preheater kiln in 2003**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (fff) One (1) kiln #3, identified as EU17, constructed in 1974 **as a one-stage preheater kiln**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

2. Section D.1 was changed as follows:

- (A) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.1.3(b).

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply:

~~(1)(a)~~ The combined PM emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 5.68 pounds per hour.

~~(2)(b)~~ The combined PM10 emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 3.40 pounds per hour.

- (b) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

(1) The Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) shall each be limited to 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.

(2) PM and PM10 emissions from baghouse QDC2 controlling the Primary Crusher (EU01) and from baghouse QDC3 controlling the Surge Bin and Transfer System (EU02) shall each not exceed 0.90 pounds per hour.

(3) PM and PM10 emissions from baghouse QDC7 controlling Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and from baghouse QDC8 controlling Belt #8 to Belt #9 Conveyor Transfer Point (EU08) shall each not exceed 0.44 pounds per hour.

(4) PM and PM10 emissions from baghouse QDC4 controlling the Secondary Crusher (EU03) and the Tertiary Crusher (EU04) and from baghouse QDC6 controlling the South Screen House (EU06) shall not exceed 1.44 pounds per hour.

(5) PM and PM10 emissions from baghouse QDC5 controlling the North Screen House (EU05) shall each not exceed 0.18 pounds per hour.

(6) PM and PM10 emissions from baghouse KDC7 controlling the Cement Kiln Dust Bin (EU24) shall each not exceed 0.89 pounds per hour.

(7) PM and PM10 emissions from baghouse KDC7A controlling the CKD Truck Uploading System (EU24A) shall each not exceed 0.36 pounds per hour.

(8) PM and PM10 emissions from baghouse KDC7B controlling Mixer (EU24B) shall each not exceed 0.54 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

- (B) To document compliance with the added D.1.3 (b), new conditions were added as D.1.6, D.1.11(a) and D.1.12

D.1.6 Testing requirement

To verify compliance with condition D.1.3(b), the permittee shall, within 180 days after startup of Kiln #1 (EU15) and Kiln #2 (EU16), perform PM and PM10 testing on the Primary Crusher (EU01), the Surge Bin and Transfer System (EU02), Belt #7 to Belt #8 Conveyor Transfer Point (EU07), Belt #8 to Belt #9 Conveyor Transfer Point (EU08), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the South Screen House (EU06), the North Screen House (EU05), the Cement Kiln Dust Bin (EU24), the CKD Truck Uploading System (EU24A) and Mixer (EU24B) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.3(b)(1), the Permittee shall maintain records of the Primary crusher (EU01), the Surge Bin and Transfer System (EU02), the Secondary Crusher (EU03), the Tertiary Crusher (EU04), the North Screen House (EU05), the South Screen House (EU06), the Belt #7 to Belt #8 Conveyor Transfer Point (EU07) and the Belt #8 to Belt #9 Conveyor transfer point (EU08) operating hours.

D.1.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.3 (b)(1) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

3. Section D.2 was changed as follows:

- (A) To reflect discontinuing the coal usage for the raw mill heater the Facility/Emissions Unit Description, condition D.2.2, D.2.4, D.2.9 and D.2.12 were changed as follows:

The raw mill facilities/emissions units, as follows:

- (1) One (1) ~~coal-fired~~ stoker for backup heat supply for the raw mills, ~~identified as EU11B and EU12B, constructed in 1977,~~ with natural gas-fired burners installed in 1999, identified as EU11A and EU12A with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the material storage building (F03), and the raw mills (EU11, EU11A, EU11B, EU12, and EU12A and EU12B) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.2.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

The raw mills (EU11 and EU12) can be fired by either the coal-fired stoker (EU11B and EU12B) or the natural gas burners (EU11A and EU12A). The limit in (a) applies only when the using the coal-fired stoker (EU11B and EU12B).

- (a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of coal in the coal-fired stoker shall not exceed six (6.0) pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.
- (b) Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply to the natural gas-fired burners (EU11A and EU12A).

D.2.9 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM testing on the Raw Mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.12 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU11B, EU12, and EU12A, and EU12B) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

(B) In order to reflect the change in the rule, condition D.2.12(b) was changed as follows:

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12 and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall

be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

- ~~(1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and~~
- ~~(2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

- (C) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.2.7. Conditions following the new D.2.7 were renumbered to account for this addition. Also, the table of contents was changed to show this addition and renumbering of conditions.

D.2.7 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) shall each be limited to 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.**
- (b) PM and PM10 emissions from baghouse RMDC1 controlling the Conveying System to Transport Raw Material to Storage (EU09) shall each not exceed 0.27 pounds per hour.**
- (c) PM and PM10 emissions from baghouse RMDC2 controlling the Shale Crusher (EU10) shall each not exceed 1.44 pounds per hour.**
- (d) PM and PM10 emissions from baghouse RMDC3 and baghouse RMDC4 controlling Raw Mill #1 (EU11) and Raw Mill #2 (EU12) respectively shall each not exceed 4.51 pounds per hour.**

- (D) To document compliance with the added D.2.7 condition, new conditions were added as D.2.17(f) and D.2.18 (d.)

D.2.17 Record Keeping Requirements

- (f) **To document compliance with Condition D.2.7(a), the Permittee shall maintain records of the Conveying System to Transport Raw Material to Storage (EU09) and the Shale Crusher (EU10) operating hours.**

D.2.18 Reporting Requirements

- (d) **A quarterly summary of the information to document compliance with Condition D.2.7(a) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

4. Section D.3 was changed as follows:

- (A) Lehigh Cement Company has appealed some of the conditions in the issued Part 70 Operating Permit. Upon further evaluation, OAQ agreed to revise Condition D.3.1 as follows:

D.3.1 Particulate [326 IAC 6-3-2]

- (a) ~~Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22) shall not exceed 61.0 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 250 tons per hour.~~ **Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from raw mill blending and kiln supply storage facilities/emissions units (EU13 and EU14) shall not exceed 61.0 pounds per hour (total for both EU13 and EU14) when operating at a process weight rate of 250 tons per hour.**
- (b) ~~Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the clinker preparation facilities/emissions units (EU25, EU26a, EU26b, EU27, and EU29) shall not exceed 53.1 pounds per hour (total for all facilities/emission units) when operating at a combined process weight rate of 120 tons per hour.~~ **Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #1 (EU18) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons per hour.**
- (c) **Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #2 (EU20) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons**

per hour.

- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the kiln feed bin #3 (EU22) shall not exceed 48.2 pounds per hour when operating at a process weight rate of 73 tons per hour.**
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the south storage drag (EU25) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.**
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the north clinker tower (EU26a) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.**
- (g) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the north storage drag (EU26b) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.**
- (h) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the south clinker tower (EU27) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.**
- (i) Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitation for Manufacturing Processes), the allowable PM emission rate from the pan clinker conveyor (EU29) shall not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.**
- ~~(e)~~ **(j) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the roll crusher (EU31) shall not exceed 60.5 pounds per hour when operating at a process weight rate of 240 tons per hour.**
- (d) (k) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #1 and associated feed bin (EU32) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.**
- (e) (l) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #2 and associated feed bin (EU33) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.**
- (f) (m) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #3 and**

associated feed bin (EU34) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.

- (g) (n) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #4, associated feed bin and separator (EU35 and EU36) shall not exceed 45 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 50 tons per hour.
- (h) (o) Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the lime bin (EU38) shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons per hour.
- (p) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the surge bin (EU37) shall not exceed 41.3 pounds per hour when operating at a process weight rate of 35 tons per hour.
- (q) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the north silo (EU39A) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.
- (r) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the south silo (EU39B) shall not exceed 46.3 pounds per hour when operating at a process weight rate of 60 tons per hour.
- (s) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the silo transfer system (EU40A) shall not exceed 63 pounds per hour when operating at a process weight rate of 300 tons per hour.
- (t) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the silo transfer system (EU40B) shall not exceed 63 pounds per hour when operating at a process weight rate of 300 tons per hour.
- ~~(i) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the finish material storage facilities/emissions units (EU37, EU39A, EU39B, EU40A, and EU40B) shall not exceed 63.0 pounds per hour (total for all facilities/emission units) when operating at a combined process weight rate of 300 tons per hour.~~
- (j) (u) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the east truck loadout bin and vacuolader (EU41 and EU42) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 450 tons per hour.
- (k) (v) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the west truck loadout bin and vacuolader (EU43 and EU44) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of

450 tons per hour.

~~(w)~~ **(w)** Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the railroad loadout bin and articuloader (EU45 and EU46) shall not exceed 60.5 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 240 tons per hour.

~~(m)~~ **(x)** Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the packing machine (EU47) shall not exceed 43 pounds per hour when operating at a process weight rate of 40 tons per hour.

(B) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.3.6(b).

(a) In order to render the requirements of PSD not applicable, the following conditions shall apply:

~~(1)(a)~~ **(1)** The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.

~~(2)(b)~~ **(2)** The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.

~~(3)(c)~~ **(3)** The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.

~~(4)(d)~~ **(4)** The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.

~~(5)(e)~~ **(5)** The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.

~~(6)(f)~~ **(6)** The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.

~~(7)(g)~~ **(7)** The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.

(b) In order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the Kiln #1 and Kiln #2 modification, the following conditions shall apply:

(1) PM and PM10 emissions from Blending Bins (EU13) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC5 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC6.

(2) PM and PM10 emissions from Kiln Supply Silos (EU14) shall each not exceed 1.06 pounds per hour while exhausting from baghouse RMDC7 and shall not exceed 0.53 pounds per hour while exhausting from baghouse RMDC8.

(3) PM and PM10 emissions from baghouse KDC1 and baghouse KDC3 controlling Kiln #1 Feed Bin (EU18) and Kiln #2 Feed Bin (EU20) respectively shall each not exceed 0.97 pounds per hour.

- (4) PM and PM10 emissions from baghouse FDC1 controlling South Storage Drag (EU25) shall each not exceed 0.47 pounds per hour.**
- (5) The North Clinker Tower (EU26A), the East Clinker Ladder (EU30) and the Finish Mill Surge Bin (EU37) shall each be limited to 1,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.**
- (6) PM and PM10 emissions from baghouse FDC2 controlling North Clinker Tower (EU26A) shall each not exceed 1.76 pounds per hour.**
- (7) PM and PM10 emissions from baghouse FDC3 controlling South Clinker Tower (EU27) shall each not exceed 1.68 pounds per hour.**
- (8) PM and PM10 emissions from baghouse FDC4 controlling Hot Spout Clinker Ladder (EU28) shall each not exceed 1.76 pounds per hour.**
- (9) PM and PM10 emissions from baghouse FDC5 controlling Pan Conveyor (EU29) shall each not exceed 1.70 pounds per hour.**
- (10) PM and PM10 emissions from baghouse FDC6 controlling East Clinker Ladder (EU30) shall each not exceed 1.21 pounds per hour.**
- (11) PM and PM10 emissions from baghouse FDC7 controlling Roll Crusher (EU31) shall each not exceed 1.84 pounds per hour.**
- (12) PM and PM10 emissions from baghouse FDC8, baghouse FDC9 and baghouse FDC10 controlling Finish Mill #1 (EU32), Finish Mill #2 (EU33) and Finish Mill #3 (EU34) respectively shall each not exceed 1.42 pounds per hour.**
- (13) PM and PM10 emissions from baghouse FDC11 controlling Finish Mill #4 (EU35) shall each not exceed 0.64 pounds per hour.**
- (14) PM and PM10 emissions from baghouse FDC12 controlling Finish Mill #4 Separator (EU36) shall each not exceed 3.27 pounds per hour.**
- (15) The Lime Bin (EU38) shall be limited 2,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.**
- (16) PM and PM10 emissions from baghouse FDC14 controlling Lime Bin (EU38) shall each not exceed 0.22 pounds per hour.**
- (17) PM and PM10 emissions from baghouse FDC13 controlling Finish Mill Surge Bin (EU37) shall each not exceed 0.49 pounds per hour.**
- (18) PM and PM10 emissions from baghouse SDC1 and baghouse SDC2 controlling North Silo (EU39A) and South Silo (EU39B) respectively shall each not exceed 1.77 pounds per hour.**

- (19) **PM and PM10 emissions from baghouse SDC3 and baghouse SDC4 controlling Silo Transfer - East (EU40A) and Silo Transfer - West (EU40B) respectively shall each not exceed 0.57 pounds per hour.**
 - (20) **PM and PM10 emissions from baghouse SDC5 and baghouse SDC7 controlling East Truck Loadout Bin (EU41) and West Truck Loadout Bin (EU43) respectively shall each not exceed 0.43 pounds per hour.**
 - (21) **PM and PM10 emissions from baghouse SDC6 and baghouse SDC8 controlling East Vaculoader (EU42) and West Vaculoader (EU44) shall each not exceed 0.22 pounds per hour.**
 - (22) **The Railroad Loadout Bin (EU45) and the Articulator (EU46) shall be limited to 2,000 hours of operation per 12 consecutive month period with compliance determined at the end of each month.**
 - (23) **PM and PM10 emissions from baghouse SDC9 controlling Railroad Loadout Bin (EU45) shall each not exceed 0.71 pounds per hour.**
 - (24) **PM and PM10 emissions from baghouse SDC10 controlling Articulator (EU46) shall each not exceed 0.21 pounds per hour.**
 - (25) **The Packing Machine (EU47) shall be limited to 5,500 hours of operation per 12 consecutive month period with compliance determined at the end of each month.**
 - (26) **PM and PM10 emissions from baghouse SDC11 and baghouse SDC12 controlling Packing Machine (EU47) shall each not exceed 1.84 pounds per hour.**
- (C) In order to reflect the above change in condition D.3.6, condition D.3.8 was changed as follows:
- D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]
- (b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.3.1(d), (e), (f), and (g) and **D.3.6**, the Permittee shall perform PM testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), and Finish Mill #4 (EU35). Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.1, and D.3.6 ~~(d)~~ **(a)(4)** and ~~(e)~~ **(a)(5)**, the Permittee shall conduct PM and PM10 testing on the finish mill #4 separator (EU36). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM10 includes filterable and condensable PM10. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.
- (D) In order to reflect the change in the rule, condition D.3.10 was changed as follows:
- D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]
- (e) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator

particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

- ~~(1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and~~
- ~~(2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.~~

If visible emissions are observed during any Method 22 visible emissions test, the Permittee must initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and conduct a follow-up Method 22 test. If visible emissions are observed, then within 24 hours of the end of the Method 22 test in which the visible emissions were observed, the Permittee must conduct a followup Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the followup Method 22 test, the Permittee must conduct a visual opacity test of each stack from which visible emissions were observed during the followup Method 22 test, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

- (E) To document compliance with the added D.3.6 (b), new conditions were added as D.3.15(e) and D.3.16 (c)

D.3.15 Record Keeping Requirements

- (e) To document compliance with Condition D.3.6(b)(5), (15), (22) and (25), the Permittee shall maintain records of the North Clinker Tower (EU26A), the East Clinker Ladder (EU30), the Finish Mill Surge Bin (EU37), the Lime Bin (EU38), the Railroad Loadout Bin (EU45), the Articulator (EU46) and the Packing Machine (EU47) operating hours.**

D.3.16 Reporting Requirements

- (c) A quarterly summary of the information to document compliance with Condition D.3.6 (b) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

5. Section D.4 was changed as follows:

- (A) Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

- (1) One (1) kiln #1, identified as EU15, constructed in 1959 **as a long dry kiln and to be modified to a one-stage preheater kiln in 2003**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also

permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

- (2) One (1) kiln #2, identified as EU16, constructed in 1959 **as a long dry kiln and to be modified to a one-stage preheater kiln in 2003**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
 - (3) One (1) kiln #3, identified as EU17, constructed in 1974 **as a one-stage preheater kiln**, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (B) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.4.1. Conditions following the new D.4.1 were renumbered to account for this addition. Also, the table of contents was changed to show this addition and renumbering of conditions.
- D.4.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]**
In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:
- (a) **The Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16) shall be limited to 321,875 tons each per 12 consecutive month period with compliance determined at the end of each month.**
 - (b) **PM emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.28 lb/ton clinker.**
 - (c) **PM10 emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.59 lb/ton clinker.**
 - (d) **NOx emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 11.14 lb/ton clinker.**
 - (e) **CO emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.67 lb/ton clinker.**
 - (f) **SO2 emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 7.51 lb/ton clinker.**
 - (g) **VOC emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 0.30 lb/ton clinker.**
 - (h) **Lead emissions from each Kiln #1 (EU15) and Kiln #2 (EU16) shall not exceed 1.69E-03 lb/ton clinker.**
- (C) In order to reflect the addition of the new D.4.1 condition the following changes were made:

D.4.5 6 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.3 4 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM and dioxin/furans shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.

D.4.7 Testing requirement

To verify compliance with condition D.4.1, the permittee shall, within 180 days after startup, perform PM, PM10, NOx, CO, SO2, VOC, and Lead testing on Kiln #1 (EU15) and Kiln #2 (EU16). These tests shall be repeated every 2.5 years.

- (D) In order to add the applicability and requirement of (CAM) 40 CFR 64, new conditions were added as D.4.5, D.4.16(e) and D.4.1.17(f). Also, the table of contents was changed to show this addition and renumbering of conditions:

D.4.5 Compliance Assurance Monitoring (CAM) Plan [40 CFR 64]

It has been determined that a Compliance Assurance Monitoring (CAM) Plan, in accordance with the requirements of 40 CFR 64, is required for the one-stage preheater kiln #1 (EU15), and the one-stage preheater kiln #2 (EU16). Pursuant to 40 CFR 64.2, CAM is required because the potential to emit SO2 is greater than one hundred (100) tons per year before control and the source is subject to the emission limitations contained in conditions D.4.2. A CAM plan was received from the source on December 19, 2002. It has been determined that compliance with the monitoring requirements of 40 CFR 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), satisfies the monitoring requirements of 40 CFR 64.

D.4.15 16 Record Keeping Requirements

- (e) To document compliance with the CAM record keeping requirements in 40 CFR 64.9, the permittee shall maintain the following records on site:
- (1) Monitoring data.
 - (2) Monitor Performance Data.
 - (3) Corrective Action Taken.

D.4.16 17 Reporting Requirements

- (f) To document compliance with the reporting requirements in 40 CFR 64.9(a)(2), the permittee shall report the information required by this rule, including but not limited to:
- (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions and exceedances, as applicable, and the corrective actions taken.
 - (2) Summary information on the number, duration and cause including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily

calibration checks, if applicable)

- (E) To document compliance with the added D.4.1, new condition were added as D.4.16(f) and condition D.6.17 (g)

D.4.16 Record Keeping Requirements

- (f) To document compliance with Condition D.4.1, the Permittee shall maintain records of the Clinker production from Kiln #1 (EU15) and Kiln #2 (EU16).

D.4.17 Reporting Requirements

- (g) A quarterly summary of the information to document compliance with Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

6. Section D.5 was changed as follows:

- (A) In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, a new condition was added as condition D.5.1. Conditions following the new D.5.1 were renumbered to account for this addition. Also, the table of contents was changed to show this addition and renumbering of conditions.

D.5.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirement of 326 IAC 2-2 (PSD) not applicable, PM and PM10 emissions from baghouse KDC2 and baghouse KDC4 controlling Clinker Cooler #1 (EU19) and Clinker Cooler #2 (EU20) respectively shall each not exceed 11.41 pounds per hour.

- (B) To document compliance with the added D.5.1, condition D.5.7 was changed and a new condition was added as condition D.3.16 (f) as follows:

D.5.7 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
Within 180 days after issuance of this Part 70 permit, the Permittee shall demonstrate compliance with the PM and opacity limits established in Condition D.5.4 and condition D.5.1, by conducting performance tests for PM from all three clinker coolers, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing. **These tests shall be conducted every 2.5 years.**

D.5.16 Reporting Requirements

- (f) A quarterly summary of the information to document compliance with Condition D.5.16 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

7. Quarterly reporting forms were added at the end of the permit to show compliance with the limits given to the following facilities:

- (A) The Primary crusher (EU01)
(B) The Surge Bin and Transfer System (EU02)
(C) The Secondary Crusher (EU03)

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- (D) The Tertiary Crusher (EU04)**
- (E) The North Screen House (EU05)**
- (F) The South Screen House (EU06)**
- (G) The Belt #7 to Belt #8 Conveyor Transfer Point (EU07)**
- (H) The Belt #8 to Belt #9 Conveyor transfer point (EU08)**
- (I) Conveying System to Transport Raw Material to Storage (EU09)**
- (J) Shale Crusher (EU10)**
- (K) North Clinker Tower (EU26A)**
- (L) East Clinker Ladder (EU30)**
- (M) Lime Bin (EU38)**
- (N) Finish Mill Surge Bin (EU37)**
- (O) Railroad Loadout Bin (EU45) and Articulator (EU46)**
- (P) Packing Machine (EU47)**
- (Q) Kiln #1 (EU15) and Kiln #2 (EU16)**

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. :093-15822-00002 and Part 70 Significant Permit Modification No.093-16851-00002.

Past Actual Emissions Upstream and Downstream of Kilns

Emission source	Actual throughput (tpy)	Flow rate (ACFM)	PM Emission (Gr/DSCF)	Operating time (hpy)	PM Emissions (tpy)	PM10 Emissions (tpy)
Primary Crusher (EU01) with BH	935,553	5,000	0.02	1,567	0.67	0.67
Quarry Surge Bin (EU02) with BH	935,553	5,000	0.02	1,567	0.67	0.67
Sec. Crusher (EU03) & Tertiary Crusher (EU04) With BH	935,553	8,000	0.02	1,567	1.07	1.07
N. Screen House (EU05) with BH	935,553	1,000	0.02	1,567	0.13	0.13
S. Sreen House (EU06) with BH	935,553	8,000	0.02	1,567	1.07	1.07
Belt 7/8 Conveyor transfer point (EU07) with BH	935,553	2,450	0.02	1,567	0.33	0.33
Belt 8/9 conveyyor transfer point (EU08) with BH	935,553	2,450	0.02	1,567	0.33	0.33
Belt #6 (EU09) with BH	60,917	1,500	0.02	2,080	0.27	0.27
Shale Crusher (EU10) with BH	119,654	8,000	0.02	1,200	0.82	0.82
Raw Mill #1 (EU11) with BH	568,718	26,000	0.02	7,401	16.49	16.49
Raw Mil #2 (EU12) with BH	567,901	26,000	0.02	7,249	16.15	16.15
Blinding Bins (EU 13) with BH (RMDC5)	1,136,618	6,000	0.02	7,492	3.85	3.85
Blinding Bins (EU 13) with BH (RMDC6)	1,136,618	3,000	0.02	7,492	1.93	1.93
Kiln Supply Silos (EU14) with BH (RMDC7)	1,136,618	6,000	0.02	7,492	3.85	3.85
Kiln Supply Silos (EU14) with BH (RMDC8)	1,136,618	3,000	0.02	7,492	1.93	1.93
Kiln #1 Feed Bin (EU18) with BH	371,715	5,500	0.02	7,972	3.76	3.76
Kiln #2 Feed Bin (EU20) with BH	368,454	5,500	0.02	8,066	3.80	3.80
Clincker Cooler #1 (EU19) with BH	230,643	101,000	0.02	7,972	69.01	69.01
Clincker Cooler #2 (EU21) with BH	230,643	101,000	0.02	8,066	69.83	69.83
Cement Kiln Dust Bin (EU24) with BH	38,126	5,330	0.02	8,367	3.82	3.82
CKD Truck uploading System (EU24A) with BH	3,664	2,000	0.02	6,090	1.04	1.04
Mixer (EU24 B) with BH	34,462	3,000	0.02	2,278	0.59	0.59
S. Storage Drag (EU25) with BH	680,733	2,800	0.02	7,949	1.91	1.91
N. Clinker Tower (EU26A) with BH	35,828	10,500	0.02	419	0.38	0.38
S. Clinker Tower (EU27) with BH	680,733	10,000	0.02	7,949	6.81	6.81
Hot Spout Clinker Ladder (EU28) with B	71,656	10,500	0.02	837	0.75	0.75
Pan Conveyor (EU29) with BH	716,561	10,165	0.02	9,367	8.16	8.16
E. Clincker Ladder (EU30) with BH	35,828	7,200	0.02	419	0.26	0.26
Roll Crusher (EU31) with BH	469,698	11,000	0.02	5,226	4.93	4.93
Finish Mill #1 (EU32) with BH	220,959	17,000	0.02	7,976	11.62	11.62
Finish Mill #2 (EU33) with BH	209,377	17,000	0.02	7,590	11.06	11.06
Finish Mill #3 (EU34) with BH	198,040	17,000	0.02	7,162	10.44	10.44
Finish Mill #4 (EU35) with BH	183,173	7,600	0.02	8,034	5.23	5.23
Finish Mill #4 Seperator (EU36) with BH	183,173	39,000	0.02	8,034	26.86	26.86
Lime Bin (EU38) with BH	2,574	1,200	0.02	1,307	0.13	0.13
Finish Mill Surge Bin (EU37) with Bh	40,578	2,800	0.02	418	0.10	0.10
N. Silo (EU39A) with BH	405,773	10,000	0.02	8,362	7.17	7.17

S. Silo (EU39B) with BH	405,773	10,000	0.02	8,362	7.17	7.17
Silo Transfer - East (EU40A) with BH	326,928	3,200	0.02	1,543	0.42	0.42
Silo Transfer - West (EU40 B) with BH	431,883	3,200	0.02	1,168	0.32	0.32
E. Truck Loadout Bin (EU41)	287,922	2,440	0.02	1,029	0.22	0.22
W. Truck Loadout Bin (EU43) with BH	431,883	2,440	0.02	1,543	0.32	0.32
E. Vacuolader (EU42) with BH	287,922	1,240	0.02	960	0.10	0.10
W. Vacuolader (EU44) with BH	431,883	1,240	0.02	1,440	0.15	0.15
Railroad Loadout Bin (EU45) with BH	37,816	4,000	0.02	126	0.04	0.04
Articulader (EU46) with BH	37,816	1,200	0.02	95	0.01	0.01
Packing Machine (EU47) with BH (SDC	39,007	10,428	0.02	2,244	2.01	2.01
Packing Machine (EU47) with BH (SDC	39,007	10,428	0.02	2,244	2.01	2.01

PM and PM10 emissions =

Flow Rate (CF /min)*Emissions Rate (Gr/CF)*(1/7000)(lb/Gr)*(1/2000)(t/lb)*60 (min/hr)*1500(hr/yr)

Potential Emissions Upstream and Downstream of Kilns

Emission source	Potential throughput (tpy)	Flow rate (ACFM)	PM / PM10 Emission (Gr/DSCF)	Operating time (hpy)	PM / PM10 Emissions (tpy)	PM/PM10 limits (lb/hr)	PM/PM10 limit (lb/ton)
Primary Crusher (EU01) with BH	1,129,625	5,000	0.02	2,500	1.13	0.90	0.002
Quarry Surge Bin (EU02) with BH	1,129,625	5,000	0.02	2,500	1.13	0.90	0.002
Sec. Crusher (EU03) & Tertiary Crusher (EU04) With BH	1,129,625	8,000	0.02	2,500	1.81	1.44	0.003
N. Screen House (EU05) with BH	1,129,625	1,000	0.02	2,500	0.23	0.18	0.000
S. Sceen House (EU06) with BH	1,129,625	8,000	0.02	2,500	1.81	1.44	0.003
Belt 7/8 Conveyor transfer point (EU07) with BH	1,129,625	2,450	0.02	2,500	0.55	0.44	0.001
Belt 8/9 conveyyor transfer point (EU08) with BH	1,129,625	2,450	0.02	2,500	0.55	0.44	0.001
Belt #6 (EU09) with BH	73,886	1,500	0.02	2,500	0.34	0.27	0.009
Shale Crusher (EU10) with BH	156,524	8,000	0.02	2,500	1.81	1.44	0.023
Raw Mill #1 (EU11) with BH	687,883	26,000	0.02	8,760	19.76	4.51	0.057
Raw Mil #2 (EU12) with BH	668,586	26,000	0.02	8,760	19.76	4.51	0.059
Blinding Bins (EU 13) with BH (RM	1,374,948	6,000	0.02	8,760	4.64	1.06	0.007
Blinding Bins (EU 13) with BH (RM	1,374,948	3,000	0.02	8,760	2.32	0.53	0.003
Kiln Supply Silos (EU14) with BH (RMDC7)	1,374,948	6,000	0.02	8,760	4.64	1.06	0.007
Kiln Supply Silos (EU14) with BH (RMDC8)	1,374,948	3,000	0.02	8,760	2.32	0.53	0.003
Kiln #1 Feed Bin (EU18) with BH	489,250	5,500	0.02	8,760	4.26	0.97	0.017
Kiln #2 Feed Bin (EU20) with BH	489,250	5,500	0.02	8,760	4.26	0.97	0.017
Clincker Cooler #1 (EU19) with BH	321,875	101,000	0.02	8,760	49.98	11.41	0.311
Clincker Cooler #2 (EU21) with BH	321,875	101,000	0.02	8,760	49.98	11.41	0.311
Cement Kiln Dust Bin (EU24) with	5,719	5,330	0.02	8,760	3.91	0.89	1.368
CKD Truck uploading System (EU24A) with BH	549	2,000	0.02	8,760	1.58	0.36	5.763
Mixer (EU24 B) with BH	5,170	3,000	0.02	8,760	2.37	0.54	0.918
S. Storage Drag (EU25) with BH	680,733	2,800	0.02	8,760	2.05	0.47	0.006
N. Clinker Tower (EU26A) with BH	35,828	10,500	0.02	1,500	1.32	1.76	0.074
S. Clinker Tower (EU27) with BH	863,557	10,000	0.02	8,760	7.34	1.68	0.017
Hot Spout Clinker Ladder (EU28) w	71,656	10,500	0.02	1,500	1.32	1.76	0.037
Pan Conveyor (EU29) with BH	899,385	10,165	0.02	8,760	7.46	1.70	0.017
E. Clincker Ladder (EU30) with BH	35,828	7,200	0.02	1,500	0.90	1.21	0.050
Roll Crusher (EU31) with BH	652,522	11,000	0.02	8,760	8.07	1.84	0.025
Finish Mill #1 (EU32) with BH	284,947	17,000	0.01	8,760	6.24	1.42	0.044
Finish Mill #2 (EU33) with BH	273,365	17,000	0.01	8,760	6.24	1.42	0.046
Finish Mill #3 (EU34) with BH	151,374	17,000	0.01	8,760	6.24	1.42	0.082
Finish Mill #4 (EU35) with BH	183,173	7,600	0.01	8,760	2.79	0.64	0.030
Finish Mill #4 Seperator (EU36) wit	183,173	39,000	0.01	8,760	14.31	3.27	0.156
Lime Bin (EU38) with BH	2,574	1,200	0.02	2,500	0.27	0.22	0.210
Finish Mill Surge Bin (EU37) with B	50,176	2,800	0.02	1,500	0.37	0.49	0.015
N. Silo (EU39A) with BH	405,773	10,000	0.02	8,760	7.91	1.81	0.039

S. Silo (EU39B) with BH	405,773	10,000	0.02	8,760	7.91	1.81	0.039
Silo Transfer - East (EU40A) with E	326,928	3,200	0.02	8,760	2.53	0.58	0.015
Silo Transfer - West (EU40 B) with	431,883	3,200	0.02	8,760	2.53	0.58	0.012
E. Truck Loadout Bin (EU41)	287,922	2,440	0.02	8,760	1.93	0.44	0.013
W. Truck Loadout bin (EU43) with	431,883	2,440	0.02	8,760	1.93	0.44	0.009
E. Vaculoader (EU42) with BH	287,922	1,240	0.02	8,760	0.98	0.22	0.007
W. Vaculoader (EU44) with BH	431,883	1,240	0.02	8,760	0.98	0.22	0.005
Railroad Loadout Bin (EU45) with E	37,816	4,000	0.02	2,000	0.72	0.72	0.038
Articuloader (EU46) with BH	37,816	1,200	0.02	2,000	0.22	0.22	0.011
Packing Machine (EU47) with BH (39,007	10,428	0.02	2,000	1.88	1.88	0.097
Packing Machine (EU47) with BH (39,007	10,428	0.02	3,500	3.30	1.88	0.169

276.86

PM and PM10 Past actual Fugitive Emissions Upstream and Downstream of Kilns

Category	PM (tpy)			PM10 (tpy)		
	1999	2000	Average	1999	2000	Average
Quarry Operations	118.32	121.64	119.98	88.34	91.65	90.00
Raw Material and Fuel Storage/Handling	26.66	25.56	26.11	18.17	18.49	18.33
Raw Mill/Blending Operations	0.66	0.69	0.68	0.23	0.24	0.24
Kiln System/Clinker Transfer, Handling, and Storage	0.00	0.64	0.32	0.00	0.32	0.16
Finish Mill Operation	0.59	0.55	0.57	0.21	0.19	0.20
Product Storage, Packaging, and Shipping	32.20	31.82	32.01	7.83	7.82	7.83
Misc. Sources / Operations	20.56	31.82	26.19	9.73	15.30	12.52
Total Actual Fugitive Emissions	198.99	212.72	205.86	124.51	134.01	129.26

PM and PM10 Potential Fugitive Emissions Upstream and Downstream of Kilns

Category	PM (tpy)	PM10 (tpy)
Quarry Operations	135.54	105.54
Raw Material and Fuel Storage/Handling	20.06	6.22
Raw Mill/Blending Operations	0.81	0.28
Kiln System/Clinker Transfer, Handling, and Storage	0.10	0.05
Finish Mill Operation	0.59	0.21
Product Storage, Packaging, and Shipping	17.12	5.99
Misc. Sources / Operations	30.74	15.01
Total Actual Fugitive Emissions	204.96	133.30

Past Actual Emissions from Raw Mill Stoker

Emission Source	Throughput (tpy)	Pollutant	Emission Factor		Emissions (tpy)
			Gr/dscf	lb/ton (CL)	
Raw Mill Stoker venting through Raw Mill #1 and #2 Baghouse (RDMC3 and RMDC4)	738	PM	0.02		*
		PM10	0.02		*
		NOx		22	8.12
		CO		5	1.85
		SO2		98.8	36.46
		VOC		0.05	0.018

* Actual Emissions for Raw Mill Stoker accounted for in Raw Mill #1 and #2 (EU11 & EU12)

Potential Emissions from Raw Mill Stoker

Emission Source	Throughput (tpy)	Pollutant	Emission Factor		Emissions (tpy)
			Gr/dscf	lb/ton (CL)	
Raw Mill Stoker venting through Raw Mill #1 and #2 Baghouse (RDMC3 and RMDC4)	0	PM	0.02		0
		PM10	0.02		0
		NOx		22	0
		CO		5	0
		SO2		98.8	0
		VOC		0.05	0

Coal usage for the raw mill heater will be discontinued for drying in the raw mill, only NG will be used

Emission Factors (lb/ton(cl))

Pollutant	Potential	Actual
PM	0.28	0.35
PM10	0.59	0.85
NOx	11.14	15.45
SO2	7.51	10.22
CO	1.67	1.95
VOC	0.3	0.27
H2SO4 mist	2.46E-02	3.90E-02
H2S	0.0085	0.037
PB	1.69 E-3	2.10E-05

H2S and H2SO4 EF are based on on AP-42 as follows:

Convert SO3 to H2SO4

$$\frac{0.014}{80} = \frac{X}{98} \quad \text{Therefore } X = \frac{0.0172}{98}$$

Convert SO4 to H2SO4

$$\frac{0.0072}{96} = \frac{Y}{98} \quad \text{Therefore, } Y = \frac{0.0074}{98} = 0.0246$$

Convert SO3 to H2S

$$\frac{0.014}{80} = \frac{X}{34} \quad \text{Therefore } X = \frac{0.006}{34}$$

Convert SO4 to H2SO4

$$\frac{0.0072}{96} = \frac{Y}{34} \quad \text{Therefore, } Y = \frac{0.0025}{34} = 0.0085$$

Past Actuals

	Hours			Tons		
	1999	2000	Average	1999	2000	Average
Kiln #1	7,837	8,106	7,972	228,566	232,360	230,463
Kiln #2	8,183	7,949	8,066	226,251	230,632	228,442
Total			16,038	454,817	462,992	458,905

Past Actual Emission

Emissions (tpy)	PM	PM10	NOx	CO	SO2	VOC	H2S	H2SO4 mist	Lead
1999	79.6	193.3	3,513.5	443.4	2,324.1	61.4	1.9	5.6	0.005
2000	81.0	196.8	3,576.6	451.4	2,365.9	62.5	2.0	5.7	0.005
Average	80.3	195.1	3,545.1	447.4	2,345.0	62.0	2.0	5.7	0.005

Emissions (tpy)= total actual Clinker production (tpy)*EF(lb/ton)*(1/2000)(t/lb)

Future Potential (stpy)

	Hours	Clinker
Kiln #1	8,760	321,875
Kiln #2	8,760	321,875
Total		643,750

Modification Potential Emission

Emissions (tpy)	PM	PM10	NOx	CO	SO2	VOC	H2S	H2SO4 mist	Lead
Emission Factor (lb/ton(cl))	0.28	0.59	11.14	1.67	7.51	0.3	0.037	3.900E-02	1.69 E -3
Kiln #1	44.5	94.9	1,793.5	268.8	1,208.7	48.9	6.0	6.28	0.272
Kiln #2	44.5	94.9	1,793.5	268.8	1,208.7	48.9	6.0	6.28	0.272
Total	89.0	189.8	3,587.0	537.6	2,417.4	97.8	11.9	12.6	0.5

Emissions (tpy)= Potential Clinker production (tpy)*EF(lb/ton)*(1/2000)(t/lb)